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SOME PROBLEMS IN JAINA PSYCHOLOGY

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PREFACE

A study of Jainism in terms of Western thought is much needed to day. With over-specialization in the empirical sciences and in philosophy, we are apt to lose the wood in the trees. In this age of 'analysis' it is necessary to re-assess the place of a synthetic approach to the fundamental problems of philosophy and psychology.

The present publication is essentially the same as the thesis submitted by me for the degree of Doctor of Philosophy to the Karnatak University, Dharwar. It is an attempt to interpret the problems of Jaina psychology in terms of Western thought. I am aware that it is not possible to compare the ancient Indian thought with the concepts of modern psychology. However, it would be sufficient if I could succeed in pointing out some possible similarities between ways of thinking out problems by ancient Indian Philosophers including the Jainas and thinkers of the West

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Vijayadasamī, 19th October, 1961. T. G. KALGHATGI.

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SOME PROBLEMS IN JAINA PSYCHOLOGY

INTRODUCTION

The aim of this treatise is to present some problems of Jaina psychology with reference to ancient Indian and Western thought including Western psychological thought, specially of the eighteenth and nineteenth centuries.

Jainism is a realistic philosophy. As a religion it is a polemic against the authority of the Vedas and the pseudo-spiritualism of the elaborate sacrificial system of worship. Jainism is an old religion which prevailed even before Pärśva and Vardhamana, the last two tirthankaras. The Yajurveda mentions Rsabha, Ajita and Aristanemi as tirthankaras. The Bhagavata Purana endorses the view that Rsabha was the founder of Jainism reflects the cosmology and anthropology of a much older pre-Aryan upper class of North-Eastern India.² Jacobi has traced Jainism to early primitive currents of metaphysical speculation.⁸ But the Jaina metaphysics, epistemology and psychology have arisen as a result of the interaction of the 'orthodox' ways of Indian thought. The Jaina system of thought arose out of the need to re-assert the Jaina faith against the academic invasions of Hindu thought. Elements of the Hindu and Buddhist theories have been incorporated in the Jaina theory of knowledge. As an example of such interaction we may mention the Jaina theory of pratyaksa as a source of knowledge. The original Jaina theory of pratyaksa as a direct source of knowledge of the soul and paroksa as knowledge due to the sense organs were modified in the light of the prevailing views of other systems of Indian However, in this treatise we are not directly concerned with the problems of the antiquity of Jainism and the chronological order of the Jaina epistemological and psychological theories.

The Indian mind is synthetic. It is the synthetic view that has made our philosophy embrace all branches of knowledge into one comprehensive view. In recent times, the sciences have become independent and they have freed themselves from the bonds of philosophy. But in ancient India, as also in the ancient West, philosophy included all the sciences. For instance, there was no special science of psychology. It was a philosophy of the mind. The term psychology belongs to our 'new world'. Even half a century ago it was a philosophy of the mind or it was at least a mental physiology. Contemporary psychology, especially the British and the American psychology, may be considered as a science detached from the

I Radhakrishnan (S.): Indian Philosophy, Vol. I., p. 287.

² Zimmer (H.): Philosophies of India, p 217.

³ Jacobi (Hermann): Studies in Jainism-Jainism.

⁴ Rhys Davids (Mrs. : Birth of Indian Psychology-Introduction.

prevailing philosophical systems. But, as Murphy shows, German psychology was and still is related to philosophy, and changes in psychology can be traced to developments in philosophy.⁵

In the Jaina thought, as also in the ancient Indian thought, the problems of epistemology and the problems of psychology were Epistemology was the basis for the psychological indistinguishable. analysis of mental states and events. Many problems of psychology were unintelligible without consideration of the basic metaphysical Psychology was possible only under the shadow of problems. And the Jaina psychology, if it may be called psychology, metaphysics. may be considered to be academic and rational psychology. use the method of experiment. It relied on introspection and the insight of seers and to some extent on the observation of the behaviour The insight of the ancient sages of India gave them a vivid picture of the reality in its various colours. It is the insight and the vision of the Jaina sages that built the superstructure of the mental philosophy of experience for the Jainas. They did not base their conclusions on experimental investigations. This was because the Jaina, as also the Indian mind generally, was not interested in the analysis of the things of the world. Experimental investigation had little meaning for them.

PLAN OF THE WORK

This treatise is analytic and interpretative. It is not possible to compare the problems of Jaina psychology with the present problems in psychology, because psychology in the present day has become an objective and a concrete science using experimental methods for investigation, In the modern age, increase in knowledge has meant increase in specialization. The specialized developments of the problems of modern psychology cannot be easily compared with the ancient psychological problems that the Jaina and the other Indian thought presented. We can only show that some problems in Western psychology have developed on similar lines to those presented in the Jaina philosophy. The problems of modern psychology have developed in a more exact and measurable direction. cannot be said of the ancient Jaina thought. However, the basic problems were the same and the approach was similar. In this sense, some theories of psychology have been mentioned here by way of comparison. object is to show a few possible similar developments in the field of psychological investigations in the Jaina, ancient Indian and Western thought.

This work begins with the study of the self in Jaina philosophy. Discovery of the self was the main problem of Indian philosophy. The effort of Indian philosophy has been to know the self and make the knowledge effective in human life.

⁵ Murphy (G.): Historical Introduction to Modern Psychology-Preface,

The first chapter, therefore, discusses the problem of the soul in Jaina thought. The idea of the soul has occupied an important position in Indian thought. Jainism makes a dichotomous division of the categories into jiva and ajīva. Jainism considers the soul from the noumenal point of view, niścaya naya, and the phenomenal point of view, the vyavahāra naya. The psychological implications of the nature of the soul have been discussed in this chapter.

The second chapter deals with the Jaina theory of mind in all its aspects. Jainas make a distinction between the two phases of the mind as (i) the material phase (dravya manas) and the mental phase (bhāva manas). The first phase refers to the structural aspect, and the second refers to the mental and functional aspects. The Jainas make mind a quasi-sense organ. Similarly, it is aprāpyakāri, as it does not come into physical contact with the object. These problems have been fully discussed with special reference to Indian and Western thought.

The main problems in the third chapter are the interpreta-Upayoga is the essential tion of upayoga, jñāna and darśana. It is interpreted here as the horme of the characteristic of the soul. Cetanā, or consciousness, is the psychic backmodern psychologists. ground of all experiences. Jñāna and darśana are the manifestations of upayoga in the light of the psychic background of cetana, problems concerning consciousness, like the states of consciousness and self-consciousness, have also been analysed. The Jainas, as other Indian philosophers, were aware of the unconscious in its psychological and metaphysical aspects. In the end, a note on pasyatta, interpreted as mneme, is also added.

In the fourth chapter we come to the analysis of sense organs and sense qualities. The Jainas have given a detailed description of the nature and function of the sense organs. They have accepted five sense organs. They do not recognize motor organs of experience. They make a distinction between the structural aspect (dravyendriya), and the psychic aspect (bhāvendriya). The visual sense organ is aprāpyakāri, as it does not come into physical contact with the object. The other four sense organs are prāpyakāri, because of the physical contact with the object for cognition. Similarly, the psychological analysis of the sense qualities, as presented by the Jainas, is given in this chapter.

The fifth chapter deals with the problem of empirical experience. It is the problem of perception. The Jaina analysis of perception is complex and elaborate. It has a great psychological significance. The Jainas mention four stages of perception: (i) avagraha, the stage of sensation, (ii) $ih\bar{a}$, the stage of integration of sense impressions, (iii) $av\bar{a}ya$, perceptual judgment, and (iv) $dh\bar{a}ran\bar{a}$, retention. These problems have been discussed in the light of the analysis of perception.

In the sixth chapter we come to the problem of other sources of empirical experience. Retention (dhāraṇā), recollection (smṛti), and recognition (pratyabhijñā) are factors involved in memory. This chapter gives the analysis of retention as the condition of memory, and recollection and recognition as forms of expressing memory. Similarly, the psychological implications of inference (anumāna) as a source of knowledge have also been analysed.

In the seventh chapter the problem of supernormal perception The Jainas believe that sense experience is not sufficient is discussed. to give the experience of reality. They accept the possibility of direct experience without the instrumentality of the sense organs and the mind. They called this pratyaksa. This is the supernormal perception. schools of Indian thought, except the Carvaka, accept the possibility of supernormal experience. The Jainas have given three levels of supernormal perception: (i) avadhi, (ii) manahparyāya and (iii) kevala, although avadhi may not be called supernormal experience. Avadhi may be compared to clairvoyance, and manahparvava may be likened to telepathic cognition. The two forms of supernormal experience have been analysed with reference to the investigations of modern psychical research. For the kevala there is no comparison. It is the state of omniscience.

Chapter eight gives the description of the fourteen stages of the struggle for the realization of the self. They are called guṇasthānas in Jainism. The transcendental self is to be realised. The way to self-realization is long and difficult. It is a struggle for emancipation and for the attainment of perfection. In the fourteenth stage one reaches the consummation of self-realization. This is the stage of kaivalya, or niranjana. The struggle for perfection in the fourteen stages is psychologically important, although empirical psychology will not be able to explain the significance of these stages.

CHAPTER I

THE JAINA THEORY OF THE SOUL

The problem of the soul has been a perennial problem in religion and speculative philosophy. Primitive man had made a distinction between body and soul. The burial of the dead with their belongings and even the mummification of the Egyptians are based on such a distinction between body and spirit. The philosophical concept of the soul has developed from such primitive distinctions.

In modern psychology, the idea of the soul is no longer important. In its place has come the notion of self or 'the centre of interest.' The word 'soul' is ambiguous. Sometimes it stands for mind, sometimes for self and sometimes for both. The English word points to an entity as the cause or vehicle of physical or psychical activities of the individual person. The soul is a spiritual substance. In Indian thought the word atman has undergone various changes. It is little used in the Vedas. It primarily meant breath. In the Upanisads another word, prāna, is used for breath, and ātman stands for the innermost part of man. Man was atmavat. For the Upanisadic seers, the soul was a presupposition for all experiences. Indian philosophies, with the exception of Māyāvāda of Samkara and Ksanikavāda of the Buddhists, fundamentally agree about the nature of the soul as a permanent, eternal and imperishable substance. But the primitive Aryans believed that the life of man is continued after death in a shadowy existence in some subtle bodily form. This is not the soul of the later philosophers. Jacobi calls it the psyche. This is the development of the primitive notion of life after death lingering in some form. It is found even to-day in the practice of śrāddha. The psyche is frequently spoken of as purusa and of the size of the thumb (angusta-matra). At the time of death it departs from the body. In the oldest Upanisads the psyche is described as constituted by the prānās, psycho-physical factors. Still, these factors were not regarded as principles of personality.

The idea of the soul has occupied an important position in Jaina philosophy. Jainism aims at the liberation of the soul from the cycle of birth and death. The saving of the soul is the Christian ideal. In the Apology, Plato makes Socrates say that his mission was to get men to care for their souls and to make them as good as they can be.

Jainism is dualistic. There is a dichotomous division of categories. All things are divided into living and non-living, souls and

¹ Jacobi (Hermann): Studies in Jainism, - The Place of Jainism in Indian Thought,

non-souls. In the first verse of the *Dravyasamgraha*, we read, "The ancient among the great Jainas have described the *dravyas* as *jīva* and *ajīva*." *Jīva* is a category, and *jīva* personalised becomes *ātman*. Jainism believes in the plurality of souls. Souls are substances distinct from matter. Souls influence one another. But they are quite distinct from one another and not connected in any higher unity. They may be called spiritual monads. Jainism emphasizes the diversity of souls. Amongst the Muslim theologians, Nazam and his school maintained that the soul is a spiritual substance.

Jainism considers the soul from two points of view: the noumenal (niścaya naya) and the phenomenal (vyavahāra naya). The Dravyānuyogatarkaṇa of Bhoja describes the distinction as mentioned in the Viśeṣāvaśykabhāṣya by saying that the niścaya narrates the real things and the vyavhāra narrates things in a popular way. In the Samayasāra, Kundakundācārya points out that the practical standpoint is essential for the exposition of the inner reality of things, as a non-Āryan is never capable of understanding without the non-Āryan tongue.²

The existence of the soul is a presupposition in the Jaina philosophy. Proofs are not necessary. If there are any proofs, we can say that all the pramanas can establish the existence of the soul. "Oh Gautama, the soul is pratyakşa", said Mahavira, "for that in which your knowledge consists is itself soul." What is pratyaksa need not be proved like the pleasure and pain of the body. It is pratyaksa owing to the aham-pratyaksa, the realization of the 'I', which is associated with the functions pertaining to all the three tenses.3 William James and James Ward present self-consciousness in this form. Ward talks of the 'internal perception' or self-consciousness. The last order of knowledge of the duality of subject and object is an indispensable condition of all actual experience however simple. It is, therefore, first in order of existence. It is the subject of experience that we call the pure ego or self.4 William James says, "For, this central part of the self is felt. It is something by which we also have direct sensible consciousness in which it is present, as in the whole life-time of such moments." Thus. one who ignores the self-evidence of the soul is like one who says that sound is inaudible and the moon is devoid of the moon. The existence of the soul can be inferred from the behaviour of others. the soul exists because, "it is my word, O Gautama!"

The jīva is described from the noumenal and phenomenal points of view. From the noumenal point of view, the soul is described

² Jami (J. L.): Ed: Samayasāra. 38

³ Ganadharavāda. 6.

⁴ Ward (James): Psychological Principles, p. 370 (1918).

⁵ James (William): Principles of Psychology, Vol. I. Ch. X. p. 298.

⁶ Ganudharaváda, 34.

in the pure form. The phenomenal describes the empirical qualities of the soul. From the pure point of view, it is not associated with body or any physical or mental qualities. Mahāvīra points out to the third Gaṇadhara that the soul is different from the body and its senses; just as Devadatta recollects an object perceived through the five windows of the palace, which is different from the palace and the five windows, so also a person recollecting an object perceived through the five senses of the body is different from the senses and the body.

The Buddhist impermanence of the soul is also refuted. Buddhists had said that there was no self except the khandas. Kundakundācārya points out that from the noumenal point of view the soul and the body are not one, although in worldly practice the soul having a beautiful body is called beautiful and fair like the beautiful body of the living arhat.⁸ In the Chāndogyopaniṣad, in the dialogue between Yājnyavalkya and Janaka, the idea of the self is progressively brought out by showing that it is not physical nor a dream-state.

From the noumenal point of view, the soul is pure and perfect. It is pure consciousness. From the real point of view, the soul is unbound, untouched and not other than itself. The soul is one and not composite. In the Sthānānga we get a description of the soul as one (ege attā). The commentator describes it as ekavidhaḥātmanaḥ.9 In Samayasāra, Kundakundācārya describes the absolute oneness of the soul "on the strength of my self-realization." This does not mean that the self is one in the Vedāntic sense of cosmic self. It does not contradict the plurality of souls in Jainism. It only emphasizes the essential identity of souls. Jīvas in all their individual characteristics are essentially the same. If the soul were one, then, "O Gautama! there would not be sukha, duhkha, bandha, mokṣa etc." Individual souls are different like the kumbhas.11

The nature of jīva has been well described by Nemicandra in his Dravyasamgraha. He describes the soul both from the noumenal and phenomenal points of view. He says that jīva is characterised by upayoga, is formless and is an agent. It has the same extent as its body. It is the enjoyer of the fruits of karma. It exists in samsāra. It is siddha and has a characteristic of upward motion. We get a similar description in the Pañcāstikāyasāra of Kundakundācārya. Jīva is formless. It is characterised by upayoga. It is attached to karma. It is the Lord, the agent and the enjoyer of the fruits of karma. It pervades

⁷ Ganadharavāda, 109, and Sūtrakrtānga, 83.

⁸ Samayasāra, 39, 42.

⁹ As quoted in Abhidhanarajendra, Vol. II 'Attā',

¹⁰ Samayasāra, 5.

II Gonadharaväda, 34.

¹² Dravyasamgraha, 2,

bodies large or small. It has a tendency to go upward to the end of loka, being freed from the impurities of karma. ¹⁸ Tattvārthasūtra describes the nature of the soul as possessing upayoga as its essential characteristic.

Every jīva possesses an infinite number of qualities. Glasenapp, in his Doctrine of Karma in Jaina Philosophy, mentions eight important characteristics:

- 1. The faculty of omniscience (kevala jhāna).
- 2. The faculty of absolute undifferentiated cognition (kevala darśana).
- 3. Superiority over joy and grief.
- 4. Possession of belief in complete religious truth (samyaktva), and irreproachable moral conduct (caritra).
- 5. Possession of eternal life (aksayasthiti).
- 6. Complete formlessness (amūrtatva).
- 7. Unrestricted energy (vīryatva).
- 8. Complete equality in rank with other jīvas.

The first characteristic of the soul is upayoga. The word upayoga is difficult to define. It is the source of experience. The cognitive, conative and affective aspects spring from it. It is a differentia of the living organism. Umāsvāti says that upayoga is the essential characteristic of the soul. 14 Upayoga has conative prominence. It may be called horme in the sense that McDougall has used the term. It is a vital impulse or urge to action. P. T. Nunn has stated that horme is the basis of activity that differentiates the living animal from dead matter. It is like Schopenhauer's 'will to live', and Bergson's élan vital. Jñāna and daršana are manifestations of upayoga.

Citta or cetanā as a characteristic of the soul is important in Indian philosophy. In the Dravyasamgraha, jīva is described as possessing cetanā from the noumenal point of view. Cetanā is a sort of inclination which arises from upayoga. This inclination branches in two directions—jħāna and darśana. Darśana may be said to be undifferentiated knowledge. Jħāna is cognition defined. The jīva has infinite jħāna and darśana. But certain classes of karma, like jħānāvaraṇīya and darśanāvaraṇīya karma, tend to obscure and confuse the essential nature of the jīva. From the phenomenal point of view, darśana and jħāna tend to manifest themselves in eight kinds of jħāna and four kinds of darśana.

The possession of *upayoga* raises the question whether the *jīva* possesses *upayoga* and is yet different from it, or whether it is identical with it. The *Nyāya* theory does not recognize the identity of quality and

¹³ Pancāstikāyasāra, 27-28.

¹⁴ Tottvärthödhigamasūtra, Ch. II, 8.

its possessor. Jainism asserts that only from the phenomenal point of view they are separable. In Pañcāstikāyasāra we read "Only in common parlance do we distinguish daršana and jñāna. But in reality there is no separation." The soul is inseparable from upayoga. Horme is an essential characteristic of the living organism. It is manifested in the fundamental property experienced in the incessant adjustments and adventures that make up the tissue of life and which may be called drive or felt tendency towards an end. 16 Animal life is not merely permeated by physical and chemical processes; it is more than that. Even the simplest animal is autonomous.

The soul is simple and without parts. It is formless. soul is immaterial it has no form. This quality has been mentioned in other systems also. The Jaina thinkers were against the Buddhist idea of the soul as a cluster of khandas. Buddhists do not refer to the permanent soul. It is a composite of mental states called khandas. "In modern Western thought", Hume says, "when I enter most intimately into what I call myself, I always stumble upon some particular perception or other of heat or cold, light or shade, love or hatred, pain or pleasure. I never catch myself any time without perception, and never can observe anything but the perception."17 Höffding stated that the ego has been looked for in vain as something absolutely simple. The nature of the ego is manifested in the combination of sensation, ideas and feelings. But Herbart maintains that the soul is a simple being not only without parts but also without qualitative Modern psychology has emphasized substantiality, multiplicity. simplicity, persistence and consciousness as the attributes of the soul. Descartes has said, "I am the thing that thinks, that is to say who doubts, who affirms . . . who loves, who hates and feels...," this and he designates this thing as substance.18

Hamilton advocated the four characteristics with the greatest explicitness. Other prominent names are those of Porter, Calkins, Angell and Aveling.¹⁹

From the phenomenal point of view, fīva is also described as possessing four prāṇas. They are sense (indriya), energy (bala), life (āyu), and respiration (ana). Paṇcāstikāyasāra gives the same description. The idea of prāṇa is found in Indian and Western thought. In the Old Testament (Genesis: Book I) we read, "The Lord God breathed into the nostril the breath of life and man became a living soul." In the primitive minds we find the conception that the wind gave men life. When it

¹⁵ Pañcāstikāyasāra, 41.

¹⁶ McDougall (William): An Outline of Psychology, Ch. 3.

¹⁷ Hume (David): Treatise of Human Nature, Book I Pt. IV, 6.

¹⁸ Descartes: Meditations, II

¹⁹ Spearman (C.): Psychology Down the Ages Vol. I Ch. XXI: pp. 391-92.

ceases to blow, men die. In the Navaho legend there is a description of the life force according to which we see the trace of the wind in the skin at the tips of fingers. Prānas refer to psycho-physical factors of the The jīva assumes the bodily powers when it takes new forms in each new birth. Whatever thing manifests in the four pranas lives and is jīva.20 The four prānas are manifest in ten forms. The Bala may refer to the mind, the indriva expresses itself in five senses. body and speech. Ayu and ana are one each. These pranas in all their details need not be present in all organisms, because there are organisms with less than five sense organs. But there must be the four main The most perfectly developed souls have all the ten characteristics. This has a great biological and prānas and the lowest have only four. psychological significance. Comparative psychology points out that in the psycho-physical development of the various animal species at the lower level, the chemical sense which is affected by chemical reaction is the only sense function; and it later becomes the separate sense of taste and smell. Experimental investigations carried by Riley and Forel point out that the chemical sense is used by insects like moths even for mating. Forel has given a topo-chemical theory for explaining the behaviour of bees. As we go higher in the scale of life, the chemical sense plays little part. In birds, sight and smell are well developed. In mammals, we find a higher degree of qualitative discrimination of smell. As we go higher still, we get the variability of adaptation which may be called intelligence.

In the Brahmanas and the oldest Upanisads there is a description of the psyche as consisting of five pranas. They are regarded as factors of the physico-psychological life. Occasionally, more than five pranas are mentioned. But still the idea of a permanent self had not shaped itself. In the third adhyāya of the Brhadāranyakopanisad Yājñyavalkya was asked to explain what happens to a person after the body has been dissolved, and the parts of the psyche has been remitted to the fire and wind. He avoids the discussion and suggests that karma remains after death.21 This was a step forward towards the formation of the permanent self. Brhadarunyakopanisad also contains a discussion about the constituent parts of the soul. Eight instead of five have been suggested. Vijnāna and retah are mentioned. This vijnānamayapurusa comes nearer to the conception of the soul, although personal immortality is not emphasized. In Jainism also, the idea of a permanent soul possessing prānas must have developed on the same lines.

From the phenomenal point of view, the soul is the Lord (prabhu), the doer ($kart\bar{a}$), enjoyer ($bhokt\bar{a}$), limited to his body ($deham\bar{a}tra$), still

²⁰ Puňcástskáyasára, 30.

²¹ Ranade (R. D.): A Constructive Survey of Upunisadic Philosophy, p. 181 (1926),

incorporeal, and it is ordinarily found with karma. As a potter considers himself as a maker and enjoyer of the clay pot, so, from the practical point of view, the mundane soul is said to be the doer of things like constructing houses and the enjoyer of sense objects.22 As the soul produces impure thought-activities and as a consequence, the material karmas, it also enjoys thoughts with the help of the material karmas. Thus, liva enjoys its thought-created activity. However, from the noumenal point of view, jiva is the doer of śuddha bhāvas or pure thought (karmas); and from the phenomenal point of view, it is the doer of pudgala karmas or karmic matter.23 The distinction between the formal cause (nimitta), and material cause (upādāna), has been introduced for the description of The Jainas say that the soul is the efficient cause of the material karmas. The jiva possesses consciousness, and consciousness manifests itself in the form of various mental states. These mental states are responsible for activities which produce material karmas. therefore, asserted that jiva is the agent of thought-karmas indirectly of the karmic matter. The Pañcāstikāyasāra describes the ātman as the agent of its own bhavas. But it is not the agent of pudgala karmas.24 Jainism emphasizes the activity of the jiva as against the Sārhkhya view of the passive udāsīna purusa. As a consequence of activity, the jiva experiences happiness and misery. But Nemicandra says that it is only from the phenomenal point of view. From the noumenal point of view, jiva has consciousness and it enjoyes eternal bliss. In the Dravyasaringraha we read, "Niccayanayado cedana bhavam khu adassa". The joys and sorrows that jiva experiences are the fruits of dravya-But Buddhism believes that the agent never enjoys the fruits of karma. James Ward giving the general characterization of the varied karma. contents of the empirical self', says that the self has first of all (a) a unique interest and (b) a certain inwardness, further it is (c) an individul that (d) persists (e) is active, and finally it knows itself.25

But the process of entanglement in activity and enjoyment is beginningless. It gets entangled in the samsāra and embodied through the operation of karmas. The soul gets various forms due to the materially caused conditions (upādhic), and it is involved in the cycle of birth and death. It is subjected to the forces of karmas which express themselves first through the feelings and emotions and secondly in the chains of very subtle kinds of matter, invisible to the eye and the ordinary instruments of science. When the soul is embodied, it is affected by the environment—physical, social and spiritual, in different ways. Thus, we get the various types of soul existence. The soul embodies itself

²² Pañcāstskāyasāra, 27 and Samayasāra, 124.

²³ Dravyasamgraha, 8, 9.

²⁴ Pañoāstikāyasāra, 6, 28.

²⁵ James (Ward): Psychological Principles, Ch. XV p. 368. (1918),

and identifies itself with the various functions of the bodily and social environment. William James distinguishes between the self as known or the me, the empirical ego as it is sometimes called, and the self as knower or the I, pure ego. The constituents of the me may be divided into three classes: the material me, the social me and the spiritual me. is the innermost part of the material me. Then come the clothes, our They become parts of our empirical ego with home, and property. different degrees of intimacy. A man's social me is the recognition that he gets from his fellowmen. A man has as many selves as there are individuals and groups who recognize him. The spiritual me also belongs to the empirical me. It consists of the "entire collection of consciousness, my psychic faculties and disposition taken concretely." But the pure self, the self as the knower, is very different from the empirical self. It is the This is permanent, what the philosothinker, that which thinks. phers call the soul or the transcendental ego.26 James Ward also makes a distinction between the self known or the empirical ego, and the pure self. For him, the empirical ego is extremely complex. It is the presented self. The earliest element is the presented self, the bodily or the somatic consciousness. But they never have the same inwardness as "the sense of embodiment." We also find a certain measure of individual permanence and inwardness that belongs to the self. We may call this 'the sensitive and the appetitive self.' With the development of ideation there arises what we call the inner zone, having still greater unity and permanence. This is the imaging and desiring self. At the level of intellection, we come to the concept that every intelligent person is a person having character and history and his aim in life through social interaction. This gives conscience, a social product as Adam Smith has said. At this stage a contrast between the thinker and the object of thought is clearly formed. This is the thinking and willing self. At this stage, even the inner ideation and desire become outer, no longer strictly self. The duality of subject and object is the last order of knowledge and is the indispensable condition of all actual experience. It is the subject of experience that we call pure ego or self.27

The Jaina thinkers made a distinction between the states of the soul as bahirātman, antarātman and paramātman. Bahirātman consists in the identification of the self with body and external belongings. It is the bodily self. In this we say, 'I am the body, I am lean etc.' This identification is due to ignorance. The same soul is in the karmāvasthā and is characterized by śuddha caitanya and bliss. It is free from all sense of otherness. It has discriminative knowledge. This conscious self is antarātman in the samyagdṛṣṭi guṇasthāna. The pure and perfect self

²⁶ James (William): Principles of Psychology, Vol. I, p. 292.

²⁷ James (Ward): Psychological Principles, Ch. II.

which is free from the impurities of karma is the paramatman. It is characterized by perfect cognition and knowledge. It is freed and is a This paramātman is jāānamaya and is pure consciousness. It cannot be known by the senses. It has no indrivas and no manas. From the noumenal point of view, these are the attributes of the soul.28 The Jaina approach to the problem is metaphysical. elements of psychological investigation; but the language is the language Modern psychologists, especially the rational psychoof metaphysics. logists, stopped at psychological analysis and explained the process of realizing the pure nature of the self from the empirical stage to the stage of pure ego. But the transcendental self is not the subject of psychology. Willam James has said that states of consciousness are all that psychology needs to do her work with. 'Metaphysics or theology may prove the existence of the soul; but for psychology the hypothesis of such a substantial principle of unity is superfluous.'29

Jainism refers to the size of the soul. Although souls are not of any definite size, they contract and expand according to the size of the body in which they are incorporated for the time being. The soul is capable of adjusting its size to the physical body, as the lamp placed in a large or small room illuminates the whole space of the room. Nemicandra describes it as the phenomenal characteristic of the soul. From the noumenal point of view it is said to exist in innumerable pradeśas. In respect of the elasticity of the soul, Jainism differs from the other schools of Indian thought. As Jacobi says, the Jainas have a tenet of the size of the soul which is not shared by other philosophers.

Some philosophers like the Vaisesikas, Democritus and the atomists, thought of the soul as atomic. Some others talked of the omnipresence of the soul. Jacobi says that the original Vaisesika was not clear on this point. Some Samkhya writers preferred the soul to be infinitely small, while Iśvara Krsna and later writers characterized it as all-pervading.32 The spatial view of the habitation of the soul had occupied the minds of the Upanisadic philosophers. Upanisadic psychology agrees with the Aristotelian in localizing the soul in the heart. It was later thought that it was in the brain. Yogic and täntric books recognized the cerebro-chemical processes, and consciousness was traced In the Taittirīyopanisad (1. 6. 1. 2) we read that the to the brain. soul in the heart moves by a passage through the bones of the palate, right up to the skull, where the hairs are made to part. The soul in the heart is called manomaya. In the Kausītaki Upaniṣad the soul is

²⁸ Paramätmaprakāša, 31.

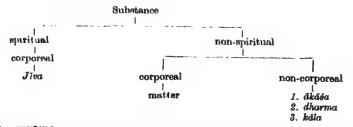
²⁹ James (William): Briefer Course, p. 203.

³⁰ Dravyasamgrahu, 10.

³¹ Jacobi (Hermann): Ed. by Jina Vijaya Muni: Studies in Jainism, p. 83.

³² Ibid, p. 84.

described as the master of all bodily functions. The senses depend on the soul as 'relatives on the rich'. The self is immanent in the whole body, and is hidden in it. This passage leads to the view, like the Jaina view, that the soul fills the body. Different other accounts are given in the Upanisads. In the Brhadaranyaka the self is described as small as a grain of rice or barley. In the Kathopanisad we find that the soul is of the size of the thumb.38 It dwells in the centre of the In the Chandogya, it is said to be of the measure of the span between the head and the chin. William James traces the feeling of self to the cephalic movements. He says that the self of selves when carefully examined is found to consist mainly in the collection of these peculiar motions in the head or between the head and the heart.34 Descarates maintains that the seat of the soul is the pineal gland. Fichte holds that the soul is a space filling principle. Lotze says that the soul must be located somewhere in the matrix of the arterial brain These accounts tend to make us believe that the soul is something material which occupies space. It is sometimes pointed out that the idea of the spatial attributes of the soul constitutes a contradiction. If the soul has no form it cannot occupy space, even the infinite pradesas; and if it is immaterial, it cannot have form. However, this contradiction is due to the difficulties of expressing the immaterial in terms of the material. This has been the perennial problem of philosophy, because the immaterial has no vocabulary of its own. The Greeks had the same difficulty. Plato had to resort to allegories and myths for expressing the immaterial. In Jainism, although the description of the soul is not metaphorical, it is just an attempt to come nearerest to immaterialism. It may be that the difficulty is due to the complexity of substance in Jainism. Jainism gives the cross division of substances as spiritual and non-spiritual, and again as corporeal and non-corporeal. Non-spiritual is ajīva. In the non-spiritual, we get the non-corporeal substance like dharma and adharma; and there is the corporeal which is called pudgala. From the phenomenal point of view, jīva comes under The corporeal need not necessarily be the spiritual but corporeal. material. The classification is as follows:



³³ Ranade (R. D.): A Constructive Survey of Upanisadic Philosophy, p. 138 (1926).
34 James (William): Principles of Psychology, Vol. I. p. 301.

If this division is accepted, there need be no contradiction. Again, when size is attributed to the soul, it is possible that it refers to the sphere or extent of the influence that is intended. In the *Pañcāstikāyasāra* we read that just as a lotus hued ruby, when placed in a cup of milk, imparts its lustre to the milk, the soul imparts its lustre to the whole body.⁸⁵

Jīva is characterized by upward motion. Nemicandra describes the pure soul as possessing ūrdhvagati. In the Pañcāstikāvasāra it is said, when the soul is freed from all impurities it moves upward to the end of loka.86 For Plato, the soul was, above all, the source of motion. It is only the self that moves. In the Phædrus, Socrates says in his second speech, "The soul is immortal, for that which is ever in motion is immortal." The self never ceases to move and it is the fountain and the beginning of motion to all that moves. The movement of the soul in samsara is due to its association with karma; but by nature it has the upward motion which it adopts when it is free from karma. But it has to stop at the top of the universe beyond which no movement is possible in pure space which is devoid of the medium for motion. The Jaina conception of the soul as possessing <u>urdhvagati</u> is more an ethical expediency than a metaphysical principle or a psychological fact.

All these attributes belong to the nature of every soul and they are clearly seen if the $j\bar{\imath}vas$ are pure and free. However, most of the $j\bar{\imath}vas$ are not pure and free. They are contaminated by some foreign elements which veil their purity and perfection. The foreign element is karma, very fine matter, imperceptible to the senses, and which enters into the soul and causes great changes. The souls are then involved in the wheel of $sams\bar{a}ra$. They become $sams\bar{a}rins$.

The samsāri iīvas are classified on the basis of various principles, like the status and the number of sense organs possessed by They are the sthavara jīvas, immovable souls. vegetable kingdom. Sir J. C. Bose has pointed out that the vegetable world has capacity for experience. They are one sensed organ-Earth, water, fire and plants are such jīvas. They possess the sense of touch. This view is peculiar to Jainism. Trasa jīvas (moving souls) have two to five senses. Worms, oysters, conches etc., possess taste and touch. Ants, bugs and lice have three senses_taste, touch and smell. Mosquitoes, bees and flies possess four senses—taste, touch, smell and sight. And birds, beasts and men have all the five senses. Again, five sensed organisms may possess mind. They are called samanaska. They may be bereft of mind (amanaska).

³⁵ Pañcāstikāyasāra, 33.

³⁶ Ibid, 79.

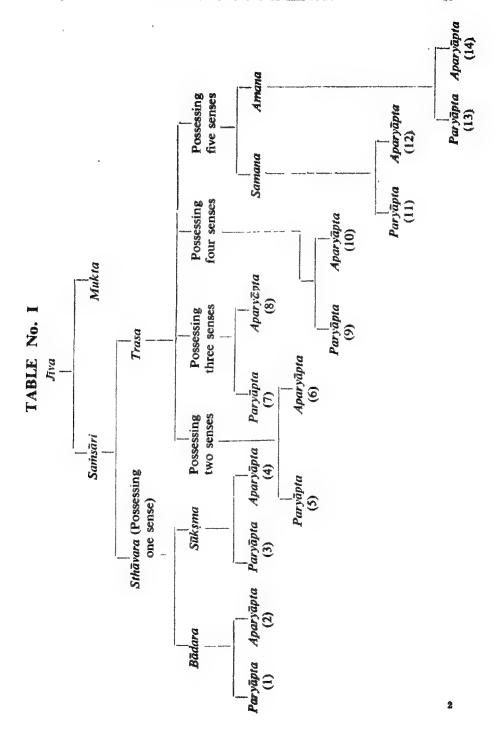
In Gommațasāra: Jīvakānda, we get a detailed classification of samsāri jīvas. This classification is shown in Table I.

Comparative psychology points out that there have been various stages in the development of animal life. The first simple animals, the protozoa, are possessed of one sense. In fact, till we reach the insect species we find that the chemical sense predominates. Positive, negative and food reactions are mainly due to the chemical sense. As we go up the animal scale, we find sensory discrimination in qualitative distinctions. Even the other senses get discriminated and developed as we proceed in the development of animal life. Similarly, the distinction between the iīvas, as paryāpta and aparyāpta, has great psychological significance. Gommatasara thus illustrates the paryapta, developed, "as the things like the room, jars, and clothes are full or empty, so the jīvas should be understood to be complete or incomplete."37 Jīva becomes paryāpta with the absorption of karmic matter for building up its body, sense, respiration and manas. One-sensed organisms become complete with the possession of food, drink, body, sense, and respiration. Similarly, the possession of these attributes makes the first four-sensed organisms paryapta or complete. For fivesensed organisms all the six are necessary. In the absence of these the jīvas are incomplete. Comparative psychology has shown that sensory discrimination has been a gradual process. Miss Washburn points out that ability to distinguish between the different sensory experiences depends on several factors, like the nature of the sense organs and the ability to make varied reaction movements.38 On the basis of these investigations, three different classes of senses, like the chemical sense. hearing and sight, have been mentioned. The chemical sense is manifested in the combined senses of taste and touch. As sensory discrimination becomes more complex, the mental life of the animal becomes more developed and pronounced.

These characteristics of the soul are mentioned from the practical point of view. Defilement of the soul takes place when the karma pours into the soul. This is called āśrava. The soul then begins to experience mundane and emotional experiences like the passions. The karma which comes into contact is retained. The soul is eternally infected with matter. Every moment it is getting new matter. In the normal course of things, it has no end. But the deliverance of the soul from the wheel of samsāra is possible by voluntary means. By the process of samvara the soul can stop the influx of karma; by nirjarā it can eliminate the karma already glued to the soul. Then all obstacles are removed and the soul becomes pure and perfect, free from the wheel of samsāra. Being free, with its upward motion the jīva attains the liberation or moksa.

³⁷ Gommațasăra, p. 118.

³⁸ Washburn (Miss): The Animal Mand, Ch. V, (1936).



In the last lines of the Gommațasāra: Jīva kāṇḍa, it is said that the liberated soul remains pure and free.

Pure and perfect souls live in eternal bliss. But they do not lose their identity as the Vedantin would emphasize. In the eighth khanda of the Chandogyopanisad, it is said that when a man departs hence his speech is merged in mind, his mind in breath, his breath in fire, which in the highest being is sat. Now, that which is the subtle essence has its self. It is the self, "and thou, Oh Svetaketu, art that." In the eleventh khanda also, we read that when the body withers and dies and the living self leaves it, the living self dies not.89 Jacobi says that here we come nearer to the concept of the soul. It differs from the Jaina concept in that the soul here does not possess a permanent personality, for in mukti the jīva is merged in Brahman and its individuality is lost. For the Jaina, McTaggart's analogy of the 'college of selves' would appear to be apter, although what type of spiritual unity there is in moksa, Jainism cannot say. McTaggart speaks of the unity of the asbolute as that of a society. All the selves are perfect, and "if an opponent should remind me", he writes, "of the notorious imperfections of all the lives of all of us, I should point out that every self is in reality eternal and that its true qualities are only seen in so far as it is considered as eternal."40 Sub specie eternitatis it is progressing towards perfection as yet unattained. The neverceasing struggle of the soul is an important tenet in Jainism. universe is not, then, an amusing pantomime of infallable marionettes, but a fight for perfection, in which "something is eternally gained for the universe by the success." The Jaina outlook is melioristic.

³⁹ Na jivo mrsyate.

⁴⁰ Pringle-Pattison (A. Seth) Idea of God, 2nd Ed. Ch. XX, p. 391.

CHAPTER II

MIND IN JAINISM

Morris in his Six Theories of Mind, has stated that there have been three stages in the history of speculation concerning mind: (i) a period in which mind and nature are vaguely conceived and differentiated; (ii) a period in which they are regarded as different and sharply opposed; and (iii) a period in which the effort is to restore, at a more complex level, the relation between mind and nature which was vaguely conceived in the beginning. Early man made no distinction between mind and nature, between his personal experience and the world outside. lispings of the early philosophers in the West faced the same problem, and they could not free themselves from the difficulties of primitive man. There was no opposition between mind and the world. It was not regarded as a private isolated substance but as a principle of motion and the order of the world. It lacked psychological orientation. Anaximenes held that air was the life of the world just as breath was the life of the body. Heraclitus suggested that reason guides all things. Empedocles spoke of God as only mind, sacred and ineffable mind. Anaxagoras said that mind is infinite and self-ruled and is mixed with nothing. "Over all mind is the ruler", he said, "and over the whole revolving universe mind held sway so that it caused it to revolve in the beginning." These were the gropings of the early philosophers regarding the principle of the universe. and there was a marked absence of any clear distinction between mind and the world of sense. Aristotle writes that, on the one hand, the atomists and the sophists identified sense and reason, and, on the other, Parmenides and Democritus made a distinction between thought and sense.2 The early Greek philosophers struggled with the problem of mind and its relation to the physical world.

The problem of mind eludes the grasp of philosophers and psychologists, because it can be analyzed into both metaphysical and psychological problems. Metaphysically, it refers to mind as the principle of the universe standing in relation to the phenomenal world. This is the cosmic principle which is emphasized by the idealists as the primary principle. Psychologically, it is the individual mind, the individual's system of psychic states in relation to the world of sense. We are, here, more concerned with the psychological significance of the mind, although the metaphysical shades do influence the psychological analysis. The early philosophers could not make a distinction between the two aspects of the

¹ Morris (C. W.): Six Theories of Mind, p. 4.

² Aristotle: De Anima, Ch. 2.

problem. This is evident in the different stages of the speculation concerning mind.

The Indian thinkers were also groping to grasp the intangible, the ineffable, and the immaterial. But they could not free themselves easily from the material. The distinction between mind and matter, the mental and the physical, was vague and unclear. In the pre-Upanisadic thought, the principle of Rta became the principle of order in the universe. It is the underlying dynamic force at the basis of the universe. It compels every animate and inaminate being to follow the law of its existence. "Even the Gods cannot transgress it." We see in the conception of Rta the development from the physical to the devine.8 "It is by the force of Rta that human brains function." Man knows by the driving force of the same immanent power which makes fire to burn and river to flow."4 The interpretation of the famous Rgvedic hymn of creation "nāsadāsīnno sadāsīttadanim" and again of "Kamastadagre samavartatadhi manaso retah pratha-Sato bandhumasati nıravindahrdi pratīsy'ā kavayo manīsā''5 main vadāsīt. gives a description that for the first time there arose kama which had the primaeval germ of manas within it. Similarly the word kratu is shown to be the antecedent of the word manas or prajñā. In Sat. Brā. 4. 1. 4. 1 there is a statement that when a man wishes, "may I do that, may I have that," that is Kratu, when he attains it, that is Duksu. The same term later changed its meaning to manas and prajñā.6

In the Upanisads the importance of the mind and its function was gradually realized, although it was still in the pre-analytic stage. the Upanisads man was spoken of as prānamaya and manomaya. We also hear the utterance of the sages, "I was elsewhere in my mind-I could not see-I could not hear."7 In the Chandogyopanisad 7, 3, 1, it is said that, when a man directs his manas to the study of the sacred hymns, he studies them; or when to the accomplishing of work, he accomplishes Again in the Brhadaranyakopanisad 4. 1. 6, we read that by the manas is the man compelled towards his wife and begets from her a son who is like him. Thus the Vedic and the Upanisadic philosophers were trying to find the cosmic principle which is the root of the universe. But their thought was still in the pre-analytic stage, or, as Renan calls it, the syncretic stage.8 This is perhaps because of the synthetic approach of the Indian thinkers. Mrs. Rhys Davids mentions that Bergson had asked what would have happened if the development of thought had

³ Radhakrishnan (8.): Indian Philosophy, Vol. 1, p. 79.

⁴ Saksens (S. K.): Nature of Consciousness in Hindu Philosophy, p. 16.

⁵ Op. cit. p. 17.

⁶ Op. cit. p. 17.

⁷ Brhadaranyakopanipad III. 1, 4.

⁸ Rhys Davids (Mrs): Birth of Indian Psychology, (Buddhism) p. 4, (1936).

started with psychology. Mrs. Davids answers that in India to some extent it did so happen.9

The analysis of the Jaina theory of mind shows there has been a conflict between the metaphysical and the psychological approaches to the problem. It is predominantly a realistic approach. The mind and its states are analysed on the empirical level. Still, the Jaina ideal is moksa, freedom of the soul from the impurities of karma. The purity and the divinity of the soul are the basic concepts of the Jaina philosphy, and mind has to be linked with the soul and interpreted in metaphysical terms. The Jaina approach was also synthetic. The evidence of the conflict can be found in the description of the various aspects of the mind.

The Jaina theory of the mind, as developed by the Jaina $\bar{a}c\bar{a}ryas$, is a theory in which mind and nature are regarded as different in kind and as sharply separated and opposed. If the classification of the stages in the speculation of the concept as presented by Morris can be used, it can be said to be in the second stage of development, although elements of the first and the third stages are not altogether absent. Traces of the primitive speculation were still found. The primitive conceptions of the mind lingered in the minds of the philosophers. Yet they also tried to overcome the conflict between mind and nature and establish the intimate relation between them. An analysis of the Jaina conception of mind will bear testimony to the view presented here.

The function of mind, which is an inner organ, is knowing and thinking. Sthānānga describes it as samkulpa vyūpāravati. Ānuvamsika gives the citta vijhāna as equivalent of the manas. "Citta manovijhānam iti paryāyah." Viseṣāvasyakabhāsya defines manas in terms of mental processes. 10 It is taken in the substantive sense. Nyāyakośa defines manas in the sense of the inner organ which controls the mental functions.

It is difficult to define mind. If at all it is to be defined, it is always in terms of its own processes. Even the psychologists of the present day find it difficult to give a definition of mind without reference to the mental processes. Older psychologists meant by mind something that expresses its nature, powers and functions in the modes of individual experiences and of bodily activity. McDougall also says that we are bound to postulate that "something"; and "I do not think", he writes, "that we can find a better word to denote something than the old fashioned word mind." McDougall defines mind as an organized system of mental and purposive forces. Wundt says that mind is a pre-scientific concept. It covers the whole field of internal experience. 12

⁹ Rhys Davids, (Mrs.): Birth of Indian Psychology, p. 11.

¹⁰ Viścedvatyakobhyńcya 3525. Manohom vá mannaye vá anena mano, Also Abhidhānarājendra. Vol. VI Mana. p. 75

¹¹ McDougall (W.): Outline of Psychology, 12th Ed., p. 35.

¹² Wundt: Physiological Psychology-Introduction, p. 3.

The old metaphysical problem whether mind and soul are distinct or identical, faced the early philosophers. Aristotle, in his De Anima, says that Democritus regarded mind as identical with the soul for the fineness of its particles. Anaxagoras is less exact. He speaks of mind as the cause of goodness or order, and, therefore, different from the soul. Mind, alone of things is simple, unmixed and pure. Elsewhere, he identifies it with soul, where he attributes it to all animals great and small, high or low.¹³ Titus Lucretius Carus says that mind and soul are kept together in close union and make up a single nature. It is the head so to speak, and it reigns paramount in the whole body.¹⁴ The Jaina thinkers asserted the distinction between soul and mind. Mahāvīra was asked by Gautama whether mind was different from the soul. "Oh Gautama", said Mahāvīra, "mind is not the soul, as speech, like mind, is different from the soul, although non-living substances have no mind." ¹⁵

The Jaina thinkers did not merely postulate the existence of mind without any evidence. They found the evidence in the experiences of the world. They also give the empirical proof for the operation of the mind. The contact of the sense organ with the soul alone does not give cognition in the relevant experiences, because there is the absence of manas. Something else is necessary for the cognition, and that is the mind. Again, the mind has the functional connotation which speaks for its nature: "Just as speech signifies the function of speaking, fire expresses the function of burning and the light shows the light." 16

Orthodox schools of Hindu philosophy postulate the existence of mind as an internal sense organ. On the evidence of cognition the contact of the soul with the sense organ is not sufficient. We must posit the existence of a manas, some additional condition which brings them together. For instance, a man may not hear a sound or see an object when the mind is pre-occupied, when the mind is elsewhere, as we read in the *Upanişads*. There is also the positive evidence in the facts of memory and of experiences like pleasure and pain.¹⁷ As mind is not tangible, the proof of mind has always to be indirect, and not direct. McDougall infers the structure of the mind from its functions. He writes that we have to build up our description of the mind by gathering all possible facts of human experience and behaviour, and by inferring

¹³ Morris (C. W.): Six Theories of Mind, p. 10.

¹⁴ Rand: Classical Psychologists, p. 98, (1912).

¹⁵ Abhidhanarajendra Vol. VI. p. 82.

Idamuktanı bhavati-sanvarthukriyaväcakasabadābhidheyā hi manahprābhitayah, tadyathā manute manyate vā manah, pradipayatiti pradipah, sabdayati bhisata ili sabdah, dahatiti dahanah, tapatiti tapanah.

¹⁶ Abhidhanarajendra Vol. VI. p. 82.

¹⁷ Bhaduri (8.): Nyāya Vaišeņika Conception of Mind—as appearing in B. C. Law Vol., II, p. 38.

from these the nature and structure of mind. He thus makes a distinction between the facts of mental activities and the facts of mental structure. It is comparable to the structure and the functions of the mechanical toy; and one who wishes to ascertain the nature of the machinery within it, can only watch its movements under various There is nothing scientifically wrong in such a proceconditions, 18 dure. Even the psychologists of our time have adopted a similar procedure. The structure of the molecules, for instance, was inferred on the basis of the observation of their behaviour.¹⁹ Recent comparative psychologists have also tried to find evidence of mind in animal behaviour. Miss Washburn says that there is no objective proof for the Evidence from behaviour has been suggested. presence of mind.20 Variability of behaviour is said to be a criterion. But this criterion was not found to be satisfactory, because from our own experience we see that very often variability is due to the physiological condition. is nothing in the mental process to account for the variability. Romanes and other psychologists have suggested that the criterion is based on the variation of behaviour as a result of previous individual experience. Miss Washburn writes, "the fact is that the proof for the existence of mind can be derived from animal learning by experience only if learning is rapid." But this evidence is not very satisfactory Yerkes and Lukas try to find structural evidence for the presence of mind. The similarity of the structure can be taken as evidence for the presence of mind. Lukas suggested morphological, physiological and teleological crietria for the presence of mind. Yerkes mentions six criteria, like the general form of the organs, the nervous system, the neural organization and specialization in the nervous system.²¹ Mind functions in various ways. Descartes said that mind is a substance which thinks. Although it is called a thing which thinks, it is an attribute of the soul. It is a thing "which doubts, understands, affirms, denies, wills, refuses, which also imagines and feels."22 Nyāya Bhāsya, in Indian thought, describes the activities of the mind as "remembrance, inference, verbal cognition, doubt, intuition, pratyaksa, dream, imagination, (ūhā) as also perception of pleasure and pain and the rest". They are indicative of the existence of the manas.23 The operation of the mind is necessary in every act of perception. This is shown by the fact that even when there is the contact of the sense organs with the respective object, there is no simultaneity of perception of all these objects. This is due to the fact that there is no such contact

¹⁸ McDougall (W.): Outlines of Psychology, 12th Ed., p. 36.

¹⁹ Naidu (P. S.): Hormic Theory, p. 17.

²⁰ Washburn, (Mise) Animal Mind, Ch. II-Evidence of mind-p. 31,

²¹ ibid.

²² Morris (C. W.): Six Theories of Mind, p. 26,

²³ Nyāya Bhāeya, I. I. 16.

conducts the impulses but also integrates them. Thus, behaviour arises on the basis of "structural modifications which are based on the various types of energy transformation." 87

In Western thought also there were philosophers who conceived of mind as material. Lucretius Carus has said that the nature of mind and also of the soul is bodily. "We perceive that our mind in our body suffers together with the body and feels in unison with it." Mind is exceedingly fine and is formed of exceedingly minute bodies—also exceedingly round, because, after death, life and mind vanish and weight does not change, just as the flavour of wine vanishes without affecting the quality of wine.³⁸

The Jaina philosophers maintained that the *bhāva manas* is the result of the activities of the *dravya manas*. It is expressed in mental processes like thinking, and the *bhāva manas* is also described as $j\bar{\imath}va$. It is the thinking *self*.

Such a description of mind as dravya manas and bhava manas, the structural and the psychical aspect, can be compared to the description of mind given by some modern philosophers. C. D. Broad, in his Mind and its Place in Nature presents a similar view. It is a modification of the instrumental theory according to which mind is a substance that is existentially independent of the body. For Broad, mind is composed of two factors neither of which is and for itself has the property of mind, but which when combined exhibits mental properties. The factors are the bodily and the psychic factors. It is comparable to a chemical compound like NaCl and H_o0 in which the individual components lose their individual identity when combined. 'mentality is likewise an emergent property composed of living body possessed of (i) the nervous system and something else and (ii) the psychic factor, which possesses some feeling like mental.'40 The bodily factor is described as "the living brain and the nervous system." About the psychic factor, Broad seems to be vague. Neither mental characteristics nor mental events seem to belong to it. It is likely to be sentience only. However, the psychic factor must be capable of persisting for a period at least after the death of the body; and it must be capable, when separated from the body, of carrying 'traces' of experience which happen to the mind of which it was formerly a constituent. In other words, it must comprise the 'mnemic mass'. Broad's view comes nearer to the

³⁷ Kuppuswamy (S.): Nature of Mind in Indian Psychology, as appearing in Hirryanna Commencation Volume.

³⁸ Rand. Classical Psychologists, p. 99, (1912).

³⁹ Videşderilyakabhaşya, 3525.

⁴⁰ Broad (C. D.): Mind and its Place in Nature, Ch. XIII and XIV Section E.

⁴¹ Also Proceedings of the Aristotelian Society, 1926, Symposium; Is mind a compound substance? Views of Dr. Hikks quoted.

Buddhist vinnāna rather to the Jaina view of bhāva manas. Of all the psychic factors in the Buddhist view, vinnāna has a more permanent nature. In the Dīgha Nikāya it is mentioned that after death the body is dissolved, mind ceases, but vinnana, the coefficient of the desire to enjoy, clings to produce its effects in some other embryo waking elsewhere 42 With this difference of the psychic factor, the Jaina distinction between the drawa manas and the bhava manas corresponds with Broad's theory of the composition of mind-In speaking of the mental structure, McDougall has likened it to the structure of a machine. However, McDougall also warns us that it should not be taken in the sense of a material structure or arrangement of parts. He likens it more to the composition of a poem or of music. "The structure of the mind is a conceptual system that we have to build up by inference from the data of the two orders, facts of behavior and the facts of introspection."48 The same can be said of the composition of the manas.

The Jaina philosophers, however, were aware of both the elements in the mental life of animals, although they were groping to find the relation between the two aspects of the mind. The analysis of the psychic factor and the idea of prana as 'bodily power' has led some philosophers like Zimmer to believe that the Jaina categories represent a comparatively primitive archaic analysis and description of human nature, many of the details of which underlie and remain incorporated in the later classic Indian view.44 Zimmer is suggesting that the analysis of the psyche that prevailed in the classic period in the synthesis of the six systems was originally not a Brahmin contribution, but non-Aryan, having come through Sāmkhya Yoga. Its categories are pre-figured in the Jaina view.45 Although the roots of the Jaina view may be primitive, the conception as developed by the Jainas presents a view of the composition of the mind which is comparable to the modern theories as already referred to. However, the dravya manas and the bhava manas are not two distinct parts, but two aspects distinguishable only by They treated manas as one activity with different aspects. The Jainas have refuted the Buddhist theory of mind as a collection of The Buddhist conception of mind is well described in the Samyukta Nikāya, Vol. II p. 194, "that which is called intelligence arises as a thing and ceases as another". It is a 'series of flash points, cinema films, thaumatrope figures welded into an apparent phenomenal unit.'48 The Jainas say that the Buddhist theory goes against belief in the other

⁴² Rhys Davids, (Mrs.); Buddhist Psychology, Ch. Mind, p. 21.

⁴³ McDougall (W.): Outline of Psychology, 12th Ed., p. 42.

⁴⁴ Zimmer: Philosophies of India, Part III, Ch. I, p. 228 (Ed. Joseph Campbell).

⁴⁵ Ibid. p. 228, Foot-note by the editor.

⁴⁶ Rhys Davids, (Mrs.): Buddhist Psychology, 2nd Ed. p. 14.

world. Mind for the Jainas is a whole and not a collection, nor even a compound of dravya and bhāva manas. Stout says that the unity of the individual mind is the unity of the complex whole which is indivisible inasmuch as its partial ingredients have not an independent existence of their own. The unity of such a mind is beyond comparison.⁴⁷

Each liva has its own mind, although the general nature of mind is one: "manana laksanatvena sayvamanasāmekatvāt", because the essential nature of mind is the expression of the mental states. In the Sthānānga we read, "ege jivānam mane". 48 In this way and according to the situation, the Gods, men, and asuras have each his own mind. In the Tattvārthasūtra, the classification of the souls, five-sensed organisms with minds, is mentioned; sahifilinah samanaskah.49 In the five-sensed organisms only some possess minds. Comparative psychologists like Kohler and Alverdes have shown that mind in the developed form is possible in the case of higher animals having insight. Naivāvikas also believe that each organism possesses a mind and sensitive organs in order that it may be in a position to cognize the objects and to experience pleasure and pain in accordance with past karma. Each self has one mind, because a single mind of atomic magnitude cannot be shared by all. This mind in each self can function only inside the organism with which the self is connected. 50 If there were one common mind for all, there would be simultaneity of cognition. A similar argument was presented by the Jaina thinkers in favour of the jiva being bhāvamanariipa. If the jīva were sarvagata, there would be cognition of everything by everyone.⁵¹ Their arguments were more metaphysical and epistemological than psychological. But modern psychology has tried to analyse the same problem from the psychological point of view. McDougall writes, "It seems probable that mind has the same nature wherever and whenever it exists or manifests itself, whether in animals, men or superhuman beings, whether in the new-born infant, the fool or the wise man. On the other hand, the structure of the mind seems to be peculiar to each individual"; not only is it different in the various species of animals (if they have minds) and in man; but the structure of the mind of one man is different from that of every other man; and, in any one man at each stage of his career or life-history, it is not quite the same as at any other stage,52

⁴⁷ Monist. Vol. XXXVI, 1936, I, 51.

⁴⁸ Abhidhanarajendra, Vol. VI. p. 82 and Sthänänga I, 6, ege deväsura manussänam tamei tamei tamei samayamei.

⁴⁹ Tattvārthasūtra, Ch. II, Butra 11.

⁵⁰ Bhaduri (8.): Nyāya Vaišesika Conception of Mind, as appearing in B. C. Law Volume.

⁵¹ Abhidhânarāzendra, VI. p. 75 · Sarvagrahaņa prasangatah api tat asangatam

⁵² McDougall (W): Outline of Psychology, 12th Ed., pp. 35-36,

The ancient Indian philosophers were faced with problems concerning the instrumental nature of the mind. It was generally believed that, like other sense organs, mind was also a sense organ, and the instrument of the soul. In the Upanisads we find references to the mind as one of the organs along with the other sense and motor organs. (jhānendriyas and karmendriyas).58 Prasna Upanisad mentions manas as a central organ. Reference to the manas as the driver of the ten organs in the Maitri Upanisad may also be noted. Orthodox Hindu philosophy accepts mind as the internal organ. There were some philosophers who made buddhi, uhamkāra, and manas together to constitute the internal organ antahkarana. But Jayanta believes that mind is an internal organ. Similarly, Vidyanandi maintains that buddhi and ahamkara cannot be regarded as sense organs. The Nyāya Vaiśesikā philosophers regarded mind as the internal organ. But Gautama did not include it in the list of the sense organs; Kanada is also silent. Vātsvāvana includes manas under the senses. He calls it the inner sense by which we apprehend the inner states of feelings, desires and cognitions. perceives the inner states by the instrument of the manas. Vatsyayana believes that mind is as good a sense organ as the eye and the like, though there are certain differences. But the Jainas believed that the mind is a no-indriva in the sense that it is different from the five sense organs. Its sense contents and functions are not entirely identical with those of indrivas. The prefix No here does not mean not, but is at times rendered as isad. It is a quasi-sense organ. Still they accept the instrumental function of the mind. In the Gommatasāra: Jīvakānda, we get a description of mind as the no-indriva. It is through the mind that mental knowledge and mental activity arise. But in the case of the mind there is no external manifestation as in the case of the other sense organs. The function of mind is assimilative.54 Pramānamīmāmsā describes mind as the thing which grasps everything. In the vetti of the same it is said, "manonindriyamiti no indriyamiti ca ucyate." In the Tattvārthasutra, the function of mind, which is anindriva, is described as the śruta cognition. second function is the mati and its modifications.⁵⁶ It is called the organ of apprehension of all objects because all sense experiences are apprehended by the mind. The Jainas accepted the instrumental nature (karanatva) of the mind. But it is said that the karana is of two types_bahya karana and antahkarana, and even the drayyamanas is described as the antahkarana,

⁵³ Deussen: Philosophy of the Upanisad, 58, Maitri Upanisad, 2-6.

^{54 (}Iommațasăra 414. No indiyatti sanna tassa have sesaindiyăņam va vattattābhāvādo.

⁵⁵ Pramanamimamed 24 and Vrtti.

⁵⁶ Tattvärthasütra II. 21 and Pramāņamīmameš vrtti—Šrutamitiķivişayina vişayasya nirdefah.

the internal organ. Being the internal organ, it is different from the other sense organs.⁸⁷

However, such a description of mind need not be interpreted in the sense that, according to the Jaina view, mind is not a sense organ; in fact, it is more than a sense organ. Its function is not specific like that of the other sense organs. It is sarvārthagrahaṇam, as it is stated in the Pramānamīmāmsā.

Another problem that the Jaina thinkers faced along with other Indian philosophers was the prapyakaritva of the mind. problem is peculiar to Indian philosophers. It refers to the capacity of the sense organ to come in actual contact with the object of experience. According to the Nyāya philosophers mind is prāpyakāri, because cognition is possible when the mind comes in contact with the object through the sense organs. The speed of the manas in contacting the object is greater than the speed of any other sense organ. But the Jainas believe that the manas is aprāpyakāri. It does not directly come in contact with the objects. They strongly object to those who argue that it is prāpyakāri. If, they say, the mind were prāpyakāri, then the mind would go out of its place and meet the objects, like the idol of Jina on the Mount Meru, both during the waking and the sleeping state. But this is not so; otherwise there would be confusion of experiences. While thinking of fire, we should experience burning. When we think of poison, we should experience poisoning. Similarly, when we think of sandalwood, we should experience coolness. 58 Even the dravya manas, although it is made of fine particles of the matter, cannot get cognition, because it is unconscious (acetana). Moreover, it is an internal organ unlike the other sense organs. Those who believe that the mind is prāpyakāri may give dream experience as evidence: the mind goes out of its place to the Jinālaya on the Mount Meru in the dream. But such experiences are also false because they do not correspond to the facts of experience. They are like the illusion of a moving circle when a burning stick is moved fast (ālaycakrabhrama). After waking up, we find that our experience in the dream was false. The argument for the prapyakaritva of the mind on the basis of undifferentiated unanalyzed cognition is also not acceptable.58 This problem has a great psychological significance, although it is found even in primitive times. It is intimately connected with the problem of the process of perception.

Ancient philosophers could not free themselves from the animistic ideas in spite of the fact that they had advanced in the direction of conceiving the immaterial as distinct from the material. The Jaina

⁶⁷ Abhádhānarājendra, Vol. VI. Manas p. 76: Karanatianao kintu karanam duridhā bhuvati-sarīrugatam antahkaranam tadbahirbhutam bāhyakarunam ca tatredam dravyamanontahkaranamevātanah.

⁵⁸ Abhidhanarajendra Vol. VI. Manas pp. 76-83 Commentaries on the gathas 213-238.

view expresses the naturalistic approach to the analysis of mental states. Still, the metaphysical approach was not absent. The Jainas were trying to see the problem from a more analytic and empirical point of view. They centered their discussions on the various facts of experience, as in the waking and the dream state, in order to find evidence for the aprāpyakāri nature of the mind.

One more problem remains, and that is the problem of the relation between body and mind. This has been a perennial problem for philosophers and psychologists of the East and the West, problem has a metaphysical and a psychological side. There have been philosophers who have made attempts to solve this problem. it refers to individual minds and bodies, or to the general relation of the finite mind with matter, there are various possible solutions to the problem. Materialists say that only the body is real, and the mind or the mental is only the product and dependent upon it. The idealists lay emphasis on the primacy of the mind. The material is unreal, or it is manifestation of the mental. There are other solutions, as of those who say that both are unreal, or two aspects of some higher reality. The realists, on the other hand, emphasize the reality of both matter and mind. Similarly, there are many divergences, specially when referring to the relation between the finite mind and the finite body. The relation between the finite body and the finite mind may be: (a) a complete dependence, as when mind is regarded as the secretion of the brain or a sort of epiphenomenon, a product, a process and similarly by-product of physical processes; (b) that of parallelism, the two series, mental and bodily, corresponding step by step, element for element to each other; (c) that of reciprocity or interaction, the mental processes being the condition of the bodily, and the bodily of the mental. The Jaina philosophers discussed the metaphysical aspect of the problem. They were, at the same time, not unaware of the psychological side of the question. Still, the distinction between the metaphysical and the psychological was not clearly drawn. Mahāvīra points out to the Ganadhara Vāyubhūti that it is not correct to maintain that consciousness is produced by the collection of the bhūtas, material elements like earth and water, as intoxication is produced by the mixture of the ghātaki flower and jaggery, although it is not found in their constituents separately. On the contrary, cetana is the quality of the soul. It is different from the bodily aspect. In this we find the refutation of the lokāyata view.50 Similar arguments are found in Sūtrakrtānga.40 In Pañcāstikāyasāra, Kundakundācarya discusses the problem from the side of the effect of karma on the jīva. On account of the rise, annihilation

⁶⁹ Ganadharavāda, Part 3, Discussion with Ganadhara Vāyubhuti

⁶⁰ Sütrakytänga Gatha 8, with commentary

and suppression of karma, jīva has five bhāvas. 61 The five physical characteristics of karma like udaya, ksaya etc., determine the corresponding psychic characteristics called bhavas. The last parinamic bhava is not causally connected with samsāra or moksa. It is a niskriya bhāva. Being affected by the changes in the karmic material, jiva experiences certain emotional states. But whatever emotional states appear in the consciousness are due to the causal agency of jīva. The extrinsic cause is the physical matter, and the proximate cause is the jiva. Karma is of two types, dravya karma and bhava karma. Peculiar combinations of paramānu (atoms), form the material karma. A change in the material karma may bring about a similar change in the psychic This conscious change has a predominantly affective tone. This is bhava karma. Thus it is really parallelistic. There are two distinct causal agencies, as nimitta kartā or efficient cause and upūdāna kartā or substantial cause. Jīva is the substantial cause of psychic changes. action is immediate. Bhava is psychic change; and it can be brought about by a psychic change only. Kārmic matter is the substantial cause of the physical changes; these are the two series which correspond to each other. Karmic matter brings about its own changes. through its own impure ways of thought that are conditioned by karmic matter, brings about its own thought changes. These two processes form independent series. This seems to suggest a psycho-physical parallelism. But the parallelism is not merely the temporal correspondence of the two series. It is transcended by the doctrine of the nimitta kartā. As in the Cartesian view, their thinking and unthinking are distinct, yet the two are related by the peculiar concept of causal relation. thinking may be the nimitta karta of the other, and the converse also may be true. However, the two causal changes are independent. Sārhkhya thinkers raised objections against such a view. If the karmic matter affects its own change and if jīva brings about his own changes, why should he enjoy the fruits of karma for which he is not responsible; and why should the two independent series affect each other? But Kundakundācārya answers that the world space is filled with material bodies, some imperceptible and some perceptible. These constitute the karma. These are the karma varganās. They are physical molecules of a particular constitution which give them the tendency to be attracted by the iīva.62 This is also known as the karma prayoga pudgala. Jīvas and karma varganās coexist. But by the mere fact of contiguity, jīva and karmic matter are brought together as the casket filled with black collyrium powder becomes black by mere contact. 68 The relation of

⁶¹ Pañcāstikāyasāra 69, 70-77. Editor's commentary.

⁶² Ibid. 70--77. Editor's note. p. 71-78

⁶³ ibid. Anjanacūrna samudgaka naya, p.71

this bhāvamanarūpa jīva to the body is described on the analogy of the mixture of milk and water: kṣīranīravat.⁸⁴ Similarly, just as the lotushued ruby placed in a cup of milk imparts its lustre to the milk, the jīva residing in the body imparts its lustre or intelligence to the body.

Radhakrishnan says that the Jainas accept the dualism of body and mind. They accept the view of parallelism with all its limitations. And to the question why jīva should suffer the fruits of karma for which it is not responsible, 'a sort of pre-established harmony' is suggested. But the Jainas do not speak merely in terms of pre-established harmony. Their theory transcends parallelism and postulates a more intimate connection between body and mind.

Some modern psychologists like Jodl would limit the extent of parallelism. Mind is correlated with body, but only under certain conditions, where there is a certain complexity of organic structure, a central nervous system. Some others like Spencer, Hoffding and Paulson make the parallelism universal. 66 The Jainas have given a modified parallelism with reference to psychic activity as determined by the karmic matter.

analysis of the Jaina concept of mind so shows that the Jainas were clearly aware of the distinction between Metaphysically, they gave the dichotomous division as mind and body. jīva and ajīva. They presented a sort of psycho-physical parallelism concerning individual minds and bodies. Yet, they were not unaware of the interaction between the mental and the bodily. The empirical approach showed them that there is such mutual influence. The idea of the nimitta-kartā was introduced for the solution of the problem. notion of the structure of the mind (dravya-manas), and the functional aspect of mind (bhava-manas), shows that they were aware of the significance of interaction. A clear and consistent formulation would have been possible if the metaphysical and the psychological analyses were clearly distinguished. The Jaina theory was an attempt at the integration of the metaphysical dichotomy of jīva and ajīva and the establishment of the interaction of the individual mind and body.

⁶⁴ Abhidānarājendra, Vol. VI, p. 75.

⁶⁵ Radhakrishnan (S): Indian Philosophy, Vol. I, p. 310.

⁶⁶ McDougall (W): Body and Mind, Chp. I, p. 111, (1911)

CHAPTER III

THE JAINA THEORY OF UPAYOGA

The Jaina philosophers talked of Upayoga as the fundamental Upayoga is the defining characteristic of the soul. 1 characteristic of life. Upayoga is that by which a function is served: Upayujyate anena iti upgyogah. It is also described as that by which a subject is grasped.² In the Gommatasāra: Jīvakānda, Upayoga is described as the drive which leads to the apprehension of objects. 8 It is the source of the psychical aspect of experience. All the three aspects-cognitive, conative and affective, spring from it. It gives rise to the experience of objects, and the experience expresses itself in forms of iñāna and darśana. Upayoga is of two types: anākāra, formless, and sākāra, possessed of form. Anākāra upayoga is formless, indeterminate cognition. Sākāra upayoga is determinate cognition, a defined form of experience. It would not be out of place to point out that upayoga is not the resultant of consciousness as it is sometimes maintained. This was one of the earlier attempts to translate upgvoga. Nor is it a sort of inclination arising from conscious-It is the conative drive which gives rise to experience. It is, in fact, the source of all experience. The Jaina philosophers were aware of the driving force of experience, the force by which experience is possible. This may be likened to the 'horme' of the modern psychologists.

The biological studies of the lower animals from the amoeba onwards show that all animals are centres of energy in constant dynamical relation with the world, yet confronting it in their own characteristic way. A name was needed to express this fundamental property of life, the drive or a felt tendency towards a particular end. Some psychologists called it 'conation' or the conative process. But this drive may not always be conscious.

There is the presence of an internal drive in such processes. "To this drive or urge, whether it occurs in the conscious life of men and the higher animals we propose to give a single name—horme". This activity of the mind is a fundamental property of life. It has various

¹ Tattvärthädhigamanitra, II-9, and Bhäsya on the same. Dravysamgraha - Jivo uvayogamayo Pañcästikäyasāra, 27.

² Prajítá, 27. V técsávasyakabhásya.

³ Gommatasāra . Jīvakānda, Ch XX, Verse 672. vatthuņitam bhāvo jādo jīvassa jo du uvajogo.

⁴ Nunn (Percy): Education-Ite Data and First Principles: pp. 28-29, 3rd Ed.

other names, like the will to live, élan vital, the life urge and the libido' Horme under one form or another has been the fundamental postulate of Lamarck, Butler, Bergson and Bernard Shaw. McDougall took great pains to present the hormic theory of psychology as against the mechanistic interpretation of life and mind.

The hormic force determines experience and behaviour. We get conscious experience because of this drive. The conscious experience takes the form of perception and understanding. Horme operates even in the unconscious behaviour of lower animals. In the plants and animals we see it operate in the preservation of organic balance. In our own physical and mental life we find examples of horme below the conscious level. We circulate our blood, we breathe and we digest our food, and all these are the expressions of the hormic energy. It operates at all levels both in the individual and the racial sense. But the horme expressed and presented by the Jaina philosophers could not be developed and analysed in terms of the modern psychology, because their analysis of upayoga was purely an epistemological problem tempered with metaphysical speculation. They were aware of the fact that there is a purposive force which actuates and determines experience. This is clear from the distinction between jñāna and darśana as two forms of upayoga.

Jñāna and Darśana

As already pointed out, the Jainas make a distinction between anākāra and sākāra upayoga. They say that anākāra upayoga (indeterminate cognition) is darśana; and sākāra upayoga is jñāna. Sākāra upayoga is specific cognition⁶ and cognizes the specific qualities of the objects. The anākāra upayoga is indeterminate and undistinguished. It is general cognition. It may be called the knowledge of acquaintance, in the language of William James.

The distinction between the indeterminate and the defined cognition, (the sākāra and anākāra upayoga), has been a great problem in the Jaina theory of cognition. It is an ancient problem which has its roots in the early distinction between the two types of karma, jħānāvaranīya and darśanāvaranīya. The Āgamas make a clear distinction between jħāna and darśana. Kundakundācārya makes a distinction between the two, both from the empirical and the transcendental point of view. He says that the ātman, its knowledge (jħāna), and intuition (darśana)—all these are identical, and they reveal the self as well as the non-self, 7 However,

⁵ Ross (James S.): Groundwork of Educational Psychology, p. 47.

⁶ Prajňäpanäsūtra, pada 29-30.

Višesāvašyakabhāsya; ākāra višesa. Abhidhānarājendra, Vol. II. p. 760.

⁷ Niyamasāra, 170.

Tatia: Studies in Jaina Philosophy, p. 73.

he does not make a clear distinction between the sākāra upayoga and the anākāra upayoga on that basis. Ācārya Vīrasena, in his commentary called Dhavalā on Satkhandāgama of Puspadanta, says, 'What comprehends an external object of the nature of the universal-cum-particular is jhāna, and comprehension of the self of the same nature is darsana.'8 They are both valid cognitions, and it is also maintained that inana comprehends the reality in its complex and universal-cum-particular nature. It is not correct to say that jñāna comprehends the particular and darsana apprehends the general only. Virasena says that the only difference between them is that iñāna knows the external reality and darsana intuits the internal self. Darśana is antarmukha, introvert; while Jhana is bahirmukha, extrovert.9 Brahmadeva in his Vrtti on Dravyasamgraha of Nemicandra gatha 43 says that darsana intuits the universal characteristic. 10 But in his commentary on gatha 44, he distinguishes two views, one from the point of view of logic and the other from the point of view of the Scriptures. Logic will give us the conception of darsana as intuition of the universal as for instance sattā.11 According to the Scriptures, the awareness of one's self which shows the striving for knowledge, and the subsequent determinate knowledge is The selfsame consciousness is called darsana as well as jñāna with reference to the object of cognition. It is called darsana when it is engaged in intuiting the self and jñāna when engaged in knowing the nonself. Other great thinkers, like Pūjyapāda, Samantabhadra, Akalanka and Vidyanandı accept the determinate and the indeterminate nature of jñāna and darśana respectively. Darśana need not be taken to be identical with indeterminate cognition (nirvikalpa pratyaksa), as it is sometimes maintained. It need not be taken as 'pure sensation of the existence of objects.12 If it were to be identified with sensation, it would be a rudimentary stage of cognition; it would be the first stage of cognition. In that case, we can accept the highest type of darsana like avadhi and kevala. The Jainas accept the possibility of the perfect darśana, kevala darśana. We may call darśana intuition, as against jñāna which may be called intellective cognition.

The temporal relation between jñāna and darśana is another problem which the Jaina philosophers faced. Ācārya Jinabhadra mentions three positions: (i) they occur simultaneously, (ii) there are alternate occurrences, and (iii) they are identical. This problem arises with reference to the perfect being. The Jainas are agreed that in the case of

⁸ Sāmānya viśesātmaka bāhyārtha grahaņam jňānam; tadātmaku svarūpa grahņam daršanam iti siddham.

⁹ Tatia : Studies in Jaina Philosophy, p. 73.

¹⁰ Quoted by Tatia. Op. cit. p. 73.

¹¹ Tarkābhi prāyena sattāvalokana-daršanam

¹² Mehta (M.): Jaina Psychology, p. 46 (1955).

the imperfect jivas there is no simultaneity of occurrence of jhana and dar-An imperfect being in the mundane existence cannot experience jhāna and darsana at the same time. There is no agreement among philosophers. Philosophers following the agamic literature maintain that there is simultaneous occurrence of jñāna and darsana even in the case of the kevalin, because Jhāna and daršana are both conscious experiences, and as such cannot occur at the same moment of experience even in the case of the kevalin much less in the case of the beings in the mundane existence, the samsārins. 18 In the Viśesāvaśyakabhāsva we get a similar view. Here Jinabhadra says that it is not true to say that when the veil of karma is removed the omniscient soul gets the two experiences simultaneously, because both of them are essentially conscious experiences. 4 Umāsvāti maintains that in the case of the mundane souls jhana and darsana as conscious mental states manifesting themselves in mati, sruta and avadhi occur one after the the other and not simultaneously. But in the case of the omniscient, where there is 'pure knowledge' and 'pure intuition', there is simultaneous occurrence of the two experiences. 15 Kundakundācārya is also of the same In the case of the kevalin the two experiences occur simultaneously even as the light and the heat of the sun.16 Pujyapada Devanandi gives a similar view. Akalanka and Vidyanandi support the simultaneous occurrence of ihana and darsana in the kevalin. If they were to occur successively, his omniscience would only be a contingent occurrence.¹⁷ There are some philosophers who do not make any difference between fhana and darsana at the highest level. They advocate the identity between the two. Haribhadra mentions that the 'old Ācāryas' held the non-difference of the jñāna and darśana.18 As pointed out by Tatia, it is difficult to determine who the 'old Acaryas' referred to were. 19 Siddhasena Divakara points out that we can distinguish between jhana darsana up to the point of manahparyāya-jāāna, but at the level of the kevala jāāna there is no difference between jñāna and darśana in the case of the omniscient. If the omnicient soul knows all in an instant, he should continue to know for ever, otherwise he does not know at all. He also says that darsana is jhana of external objects untouched by or unamenable to the sense organs. But the cognition does not cognize past and future events by means of a linga. 20 Yasovijaya sums up the discussion on this problem with the remark that philosophers looked at the problem from different points of view. Therefore,

¹³ Bhugavatisütru, VIII, 8. Praznāpanāsūtra, pada 30.

I4 Višesūvašyakabhāsya 3093. 3096.

¹⁵ Tattvārthasūtrabhāsya, 1. 31.

¹⁶ Niyamasāra, 150.

¹⁷ Astasati on Aptamimamsa, 101.

¹⁸ Nandisutra vrtti, p. 52.

¹⁹ Tatia: Studies in Jaina Philosophy, p. 79.

²⁰ Sanmatitarakaprakarana, II, 3,

none of the three positions is untenable.²¹ Those who maintained simultaneous occurrence looked at it from the empirical point of view. Jinabhadra resorted to the *rjusūtra*, analytic point of view, while Siddhasena looked at it from the *sanigrahā*, or synthetic point of view.

Apart from the logical and epistemological implications of this problem it has a great psychological significance. The experience of the kevalin is not possible for us to know. However, it is necessary to analyse the experience in its psychological aspect. The discussion of the simultaneity and the successive occurrence of jñāna and darśana in the case of the kevalin throws light on the fundamental nature of experience in the jñana and the darsang aspect. Experience is concrete, it expresses itself in the analytical and synthetic aspect. Immediate experience is a factor in the concrete psychosis. We also get the analytic experience which is aided by intellective factors. Jhāna and darsana have been very often talked of as knowledge about, and knowledge of acquaintance. But knowledge of acquaintance is not a proper phrase for darsana, because knowledge of acquaintance is a single form of cognition. It is analogous to sensation. But darkana is not to be identified with the primitive and the original form of cognition. It is higher, and yet simple. It may be referred to as intuitive experience which apprehends reality directly in a moment of experience. For instance, we very often get the solution of a mathematical problem in a flash. Parraudin, a Swiss hunter, conceived the idea that the huge blocks of rocks had been transported by glacial action. He got this as a sudden flash of insight. It was later proved by more plodding scientists. There has been a good deal of discussion regarding the knowledge of acquaintance or simple apprehension' in modern psychology. L. T. Hobhouse recognizes 'simple apprehen-James talks of the 'knowledge of acquaintance'. Hobhouse says that thought relations never constitute a content of immediate experience. "The consciousness in which we are directly or immediately aware of the content present to us a state which I venture to call apprehension, is a primitive underived act of knowledge". Prof. Stout speaks of immediate experience in similar language. Simple apprehension is the term which seems most suitable for the presence of an object to consciousness without indicating any more special relation in which the mind may stand to this object.22 Bertrand Russell also, in spite of the frequent use of the phrase 'knowledge by acquaintance', means by it the same kind of experience as Hobhouse and Prof. Stout meant by 'simple apprehension'. It is better called 'acquaintance' and not 'knowledge based on acquaintance'. We shall say that 'we have acquaintance with anything of which we are directly aware, without intermediacy of any process of inference,'28 or any knowledge of

El Jñānabınduprakarana, p. 33.

²² Stout (G. F.) Manual of Psychology: 3rd Ed., p. 103.

²³ Russell (B.) Problems of Philosophy, p. 73.

truth'. However, the term darśana cannot be translated in terms of any of these, as acquaintance or simple apprehension; they signify underived knowledge. The terms refer to simple, direct and primitive experience. Stout says that it gives the bare presence of the object to consciousness. If so, darśana would quite differ from such a form of simple apprehension. Darśana has various degrees. It admits of perfect experience which is direct and unerring, kevala darśana. Thus, it would not be appropriate to identify darśana with such a simple and primitive form of knowledge as mentioned by Hobhouse, Russell and Stout. It is best to call it intuitive experience'. Jñāna is experience which presents the analytic features of objects. It is not a state of perception, because perception is a stage of experience. It is a stage of jñāna as well as darśana; we find that matijñāna and mati-darśana are two species of cognition. Sensation and perception belong to both forms of cognition, jñāna and daršana.

In the *Dravyasamgraha*, Nemicandra says that soul in its pure form has the quality of consciousness. Brahmadeva, in his commentary writes that from the ultimate point of view, jīva is distinguished by its quality of consciousness. ²⁴ It is the most direct and nearest reality of which any one who has introspected is most immediately aware.

Consciousness has been the most important point of discussion for philosophers, psychologists as well as scientists. Attempts have been made to solve the problem from various angles. In the Aitareya Āranyaka, an effort is made to understand the different stages of the development of consciousness in the universe. In the evolution of herbs, trees and all that is animal, the atman is gradually developing. In the herbs, only sap is seen; in the animated beings, citta is seen; in man, there is gradual development of ātman, for he is now endowed with prajhā.25 Similarly, in the Chāndogyopanisad, Prajāpati describes the progressive identification of atman with body consciousness. The physico-psychological method is adopted in the Taittirīva.28 Finally, the atman as jñānamaya and The Jaina classification of the jīvas places ānandamaya is emphasized. the problem of the evolution of consciousness on a scientific basis. Jīvas have been classified into one, two, three, four and five-sensed, according to the number of the sense organs possessed by them. possessing the five senses are divided into those having mind and those without mind. It is now realized that the rise of consciousness is late in the evolution of life, from physical evolution to the evolution of life, mind and consciousness. However, it is difficult to say whether the ancient philosophers were aware of the evolution of life and consciousness in the sense understood to-day. Still, it would not be inappropriate to say that they were aware of the relatively later growth of mind and consciousness.

²⁴ Dravyasamgraha, Verse 3. niccaya nayado du cedană jassa.

²⁵ Aitareya Aranyaka. 2.3.2. 26 As quoted by Saksena (S. K.) in Nature of Consciousness in Hindu Philosophy, p. 24,

Cetana

From the speculative side, cetanā as a fundamental quality of the soul is pure consciousness, a kind of flame without smoke. This consciousness is eternal, although it gets manifested in the course of the This empirical evolutionary process of life in the empirical sense. consciousness arises from the contact of the sense organs with the objects. Thus, cetanā in its pure form gets embodied with the ātman and comes into contact with the empirical life, with the sense organs and objects. Jñāna and darsana It manifests itself in the form of jñāna and darśana. are, therefore, aspects of cetanā and cetanā is the spring-board from which they arise. It is like the flood of light in which objects are illuminated. It is the psychic background and the psychic halo of cognition in its two aspects, iñana and darsana. Cetana, therefore, is the light of consciousness that the soul possesses and through this light the cognition of objects arises.

Now, the problem arises—how to relate concepts like upayoga, cetanā, jāāna and daršana. Upayoga has been described as of two types, Jhāna and darśana. We have described upayoga as horme, the psychic force which is driving life and consciousness with a purpose. The purpose may be conscious or unconscious. On the conscious side, upayoga expresses itself into ihana and darsana. This expression is possible in the light of cetanā. If cetanā were not there, then upayoga would be purely an unconscious drive expressing itself in physiological activities like breathing and blood circulation. But we feel that even these activities are sometimes objects of our marginal consciousness. In any case, there is the psychic overtone of the physiological activities in our lives. overtone is the light of consciousness, or the light of cetand which is a permanent quality of the soul. In the background of this light the psychic drive or upayoga expresses itself into cognition, as the light of the lamp enables a man to see the objects. This irresistible force of life makes us cognize objects. Thus upayoga is force. It is the fundamental characteristic of the soul. Cetana is the background of light. It is the fundamental quality of the soul. Cognition like jñāna and dārsana are expressions of the force of upayoga in the background light of cetana.

The Jaina view of the consciousness as the quality of the soul differs from the Nyāya-Vaisesika view. Nyāya-Vaisesika philosophers believe that consciousness is a mechanical and adventitious quality produced by the contact of the various factors inhering in a substance separate from itself. The ātman in itself is unconscious, jaḍa. According to Kaṇāda, consciousness is produced in a jar through its connection with fire, "agnighatasanyogaja rohitādiguṇavat". Consciousness is conceived to be a product depending upon a suitable concourse of circumstances. 27

²⁷ Radhakrishnan (8.): Indian Philosophy, Vol. II, Ch. II, Sec. XXIII.

It is only an adventitious quality of the soul. In the state of 'deliverance', the soul is devoid of all qualities including consciousness. Even the materialist Cārvāka view says that consciousness is the result of a combination of some circumstances and material substances. Consciousness, for them, is an epiphenomenon, just a product of nature produced like the intoxicating property of the drug when the material elements are transferred into the physical body. It is said to arise in the same way as the red colour is produced by the combination of the betel-leaf, nut and lime, or is the result of mixing white and yellow. But Nyāya Vaiśeṣikas do not deny the existence of the soul. Modern epiphenomenalism maintains that consciousness is a by-product of the physical and chemical changes going on in the body. It is like the residue of a chemical action. It is like the whistle of a passing train.

During his discussion with the Third Ganadhara, Lord Mahāvīra answers the objections of the latter. He says that the presumption of Vayubhūti seems to be that consciousness is produced from the collection (samudāya) of bhūtas like earth and water. It is like the intoxication found in the combination of the ghātaki flowers and jaggery, although it is not traceable in the components separately. If the combination (samudāya) is destroyed, the consciousness is destroyed. But, Mahãvīra points out that consciousness can never exist in the collection if it is absent in the individual constituents as oil cannot come out of particles of sand. 29 But cetanā is the intrinsic quality of the soul residing in a group of bhūtas, (elements). If it were only the quality of all the elements taken together, it might also exist in a dead body. Sometimes, consciousness arises without the working of the sense organs; and sometimes, in spite of their working, the object is not apprehended. In the Sumayasāra it is said that the mere presence of the stimuli on the external environment, and even their coming into contact with the sense-organs, may not be effective to produce a psychic state like the consciousness. The presence of a psychic element, like selective attention, determines the nature of the state. Consciousness, then, has none of the characteristics that belong to any or all of the collection of knowable objects. The Jainas do not accept the transcendental consciousness, with no distinction between the ego and non-ego, of the idealists. According to Samkara, intelligence and self are identical. 30 However, the Jainas accept with the idealists that consciousness is unique and is not a product of a concourse of conditions. The Jaina view comes nearer to the view of consciousness presented by Rāmānuja. The atman is eternal, and its natural quality of

²⁸ Bărhaspatyâni sătrăni as mentioned by Saksena (S.K.) in Nature of Consciousness in Hundu Philosophy, p. 48.

²⁹ Ganadharavāda Discussion with Third Ganadhara, Verse, 101.
Also refer to: Sūtrakṛtānga 23, and its commediary.

³⁰ Atma-caitanyayorabhedah.

consciousness is also eternal. It is cidrūpa and also caitanya guṇaka. 31 The self is filled with consciousness and has also consciousness for its quality. 32 Rāmānuja tries to distinguish between the Nyāya Vaiśeṣika view and the Śāṁkara view. Consciousness is not a non-eternal quality of the self, for, in that case the self hood would be unconscious. He also wants to avoid the identity of the self and consciousness. And the Jainas also say that the self has consciousness as its essence. Since the time of Leibnitz, consciousness is admitted to be an accident of the mental representation and not its necessary, essential attribute. His contention that the inner world is richer and more concealed was well known to writers of the Upaniṣads. However, that consciousness as an aspect of the mental life is a profound truth, is slowly to be realized.

States of Consciousness

The analysis of the states of consciousness has been an important problem for philosophers as well as the psychologists. Consciousness has three aspects—the cognitive, the affective and the conative. modes of consciousness. In perceiving, believing or otherwise apprehending that such and such a thing exists and has characteristics, one's attitude is cognitive. In the affective attitude one is either pleased or displeased about it. But one is also active about it: tries to know more about it: tries to alter it in some respect. This attitude is conative.³⁸ But Stout says that though these three modes of consciousness are abstractly and analytically distinct phases in a concrete psychosis, they are not separ-They do not occur in isolation from each other. Mind is an organic unity and its activities have the closest degree of organic interaction. However, in every psychosis one of the aspects may be predominant. In the pleasure of pursuit, feeling presupposes conation. Sometimes, feeling is dependent on certain conative attitudes involved in the perceptual process. Similar reciprocity is found in conation and cognition.

Indian thinkers were aware of the distinction of states in consciousness. The Jainas recognize three forms of consciousness. They make a distinction between consciousness as knowing, as feeling and as experiencing the fruits of karma (karma phala cetanā), and willing. Conation and feeling are closely allied. As a rule we have first feeling, next conation and then knowledge. McDougall has emphasized that feeling is the core of all instinctitive activity. In fact, in all experience there is a core of feeling, while the cognitive and conative aspects are varying factors.

³¹ Sri Bhāṣya, 1.1.1., p. 30. Evamātmā cidrūpa eva caitanyagunakah.

³² Rāmānuja Bhāsya 2 3.29.

³³ Stout (G. F.): Manual of Psychology. 4th Ed., p. 106.

³⁴ Pañcāstikāyasāra, 38.

³⁵ Op. cit. 29.

In the Aitareya Upanisad there is mention of different modes of experience. Sensation, perception and ideation are different modes of intellection. recognizes feeling and volition as the other two forms of experience. seers of Upanisads give a classification of seven mental functions.³⁶ At the basis is intellection. The Chandogyopanisad emphasizes the primacy of the will. The Buddhists also recognized such a distinction. We have perception and conception, feeling and affection, and conation or will. the Buddhist theory, will is the most dominant aspect of conscious experience, the basal element of human life. Radhakrishnan in his Indian Philosophy suggests that vijñāna, vedanā and samskāra roughly correspond to knowledge, feeling and will.87 Childers in his dictionary brings the concept of conation under samskara. Mrs. Rhys Davids believes that, although there is no clear distinction between conation in the psychological sense and will in the ethical sense, still in the Pīthakas there is consistent discrimination between psychological importance and ethical implication.88 Professor Stout has given up old tripartite classification of mental states and reverts to the ancient bipartite analysis of mind bringing the affective and conative elements together under the name of interest. krishnan says that, if we discard the separation of cognition and make it the theoretical aspect of conation, we get to the Buddhist emphasis on conation as the central fact of mental life.

In the Nyāyavaiśesika theory also there is a description of the manifestation of the three aspects of self as knowledge, desire and volition. We have to know a thing before we feel the want of it. In order to satisfy the want, we act. Thus, as Hiriyanna says, feeling mediates between cognition and conation. Thus, the modes of consciousness have been the problem of philosophers and psychologists. There is a general agreement regarding the division of consciousness into three modes, although different philosophers have emphasized different aspects in the concrete psychosis. Buddhists have emphasized conation. In the *Upanisads* all the aspects have received their due prominence. The primacy of the intellect is emphasized in the Chāndogya and Maitrēya Upanisads. 89 In the Chāndogya, again, we get a description of the primacy of the will. But this has reference to the cosmic will rather than to its psychological aspect. The Jainas emphasize the close relation between conation and feeling. The Nyāya theory describes the function of feeling as a mediating factor between cognition and conation.

³⁶ Ranade (R.D.): Constructive Survey of Upanisadic Philosophy—Chapter on Psychology.

³⁷ Radhakrishnan (S.) Indian Philosophy, Vol. I, p. 400.

³⁸ Rhys Davids (Mrs.): The Birth of Indian Psychology, p. 6. (1936).

³⁹ Chandogyopanişad, VII. 5:1; Maitrēya Upanısad VI. 39.

Self-Consciousness

The term self-consciousness is very ambiguous. It may mean consciousness of the self as an object given in introspection. In this sense. the self, the empirical ego, becomes both an aspect of experience and also an object of experience. Self-consciousness may mean transcendental and pure self-consciousness. It is not an object of knowledge. It is the ultimate subject presupposed in acts of knowledge. Again, consciousness may mean the ultimate eternal consciousness, which is a metaphysical concept. It is also used in the empirical sense as consciousness which is changing.40 Some of the earlier philosophers have not made a clear distinction between the metaphysical and the psychological sense of consciousness. In the Upanisads, ātman is described as the basis and the ultimate presupposition in all knowledge. It is the absolute knower; and how can the knower itself be known?41 It cannot be comprehended by intellect. It is the seer and Yet, the atman can be known by higher intuition. It is knowable as the pratyagātmānām, apprehended by ādhyātma yoga.48 The Buddhists recognize the distinction between subject and object within They do not believe in the transcendental self. Their the consciousness. view of consciousness is like the stream of consciousness of William James. Yogācāras believe that self is a series of cognitions or ideas. There is no self apart from cognitions. They reveal neither the self nor the non-self.

Some Nyāya philosophers, especially the neo-naiyāyikas, believed that self is an object of internal perception, mānasa pratyaksa. Vaisesikas also maintain that, although the self is not an object of perception but of inference, it can be apprehended by vogic intuition. Sāmkhya philosophers maintain that consciousness is the essence of self. It is self-luminous. Self is inferred through its reflection in buddhi. Patañjali accepts the supernormal intuition of the self through the power of concentration. The self can know itself through its reflection in its pure sattva and also when mixed with rajas and tamas by supernormal intuition (pratibhā jñāna). So, the pure self can know the empirical self, but the empirical self cannot know the pure self. There is the contradiction involved in the self being both subject and object and the reflection theory does not much improve the situation. Vacaspati tries to avoid the contradiction by saying that transcendental self is the subject, and the empirical self the object, of self-apprehension.

According to Prabhákara, self is necessarily known in every act of cognition. Cognition is self-luminous. It not only manifests itself, but also supports the ātman, much as the flame and the wick.

⁴⁰ Saksona (S. K.): Nature of Consciousnes in Hindu Philosophy, Ch. V.

⁴¹ Brhadaranyakopaniyad, 2. 4. 14.

⁴² Prasnopanisad, 6, 5,

⁴³ Kathopanisad, 2, 12.

Neither the self nor the object is self-luminous. There can be consciousness of an object without the conciousness of the self. In every act of cognition there is a direct and immediate apprehension of the self. But the self can never be known as object of knowledge. It is only to be known as a subject. It is revealed by triputa sarivit.

The Jainas hold with Prabhākara that cognition is always apprehended by the self. Cognition reveals itself, the self and its object. Every act of cognition cognizes itself, the cognizing subject and the cognized object. But the Jaina denies that consciousness alone is self-luminous. He regards self as non-luminous. Self is the subject of internal perception. When I feel that I am happy I have a distinct and immediate apprehension of the self as an object of internal perception, just as pleasure can be perceived though it is without form. "Oh Gautama", said Mahāvīra, "the self is pratyakṣa even to you. The soul is cognizable even to you."44 Again, unlike the view of Prabhākara, the Jainas hold that it is the object of perception and it is manifested by external and internal perception. To the question 'how can the subject be an object of perception?', the Jaina replies that whatever is experienced is an object of perception.

William James made a distinction between the empirical self, the me, and the transcendental self, the I. The self is partly the known and partly the knower, partly object and partly subject. The empirical ego is the self as known, the pure ego is the knower. "It is that which at any moment is conscious". Whereas the me is only one of the things which it is conscious of. But this thinker is not a passing state. It is something deeper and less mutable. 45 Prof. Ward holds that the pure self is always immanent in experience, in the sense that experience without the experient will be unintelligible. It is also transcendental, in the sense that it can never be the object of our experience. 46 The Jainas were aware that consciousness of self is not possible by ordinary cognition. Therefore, they said, it is due to internal perception.

Self-consciousness does not belong to the realm of pure consciousness which is foundational and without limitation. That is the cetanā which is the essential quality of the soul. But when we descend to the practical level, the realm of vyavahāra, we find the distinction between subject and object in consciousness. The question whether the self is perceived by direct experience like the internal perception of the Jainas, or by the immediate intuition, (pratibhā jhāna) of the Vedāntins, is raised as a consequence of this distinction. In all this, the question is answered from the empirical point of view. On this basis, we may say that there are two aspects of consciousness: (a) pure and transcendental

⁴⁴ Ganadharavāda, Ch. I.

⁴⁵ James (William): Principles of Psychology, Chap. X.

⁴⁶ Ward (James): Psychological Principles, p. 380 (1920).

consciousness, and (b) empirical consciousness. Atman is pure consciousness. Jiva is consciousness limited by the organism. $\bar{A}tman$ is the subject of consciousness. It is also the object of internal perception, but only in the sense that it is immanent in consciousness though not clearly cognized as object. Jiva is both the subject and the object of consciousness, because it is the cognizer as well as the cognized.

The Unconscious

Now we come to the idea of the unconscious. The idea of the unconscious has become very important in modern psychology and has been popularized by the Freudians. In fact, it has developed in its two aspects—the metaphysical and the psychological. Plato, in his Charmides, states in the wake of a Socratic dictum, that knowledge of the self consists in what one knows and what one does not know. Psychologically, the idea of the unconscious has developed along with that of the conscious. Montague speaks of desires and thoughts as being imperceptible. Leibnitz speaks of unconscious mental states. Kant mentioned the 'dark' percepts of which we are not aware. Hamilton analysed the unconscious into three degrees of latency. In recent times, psycho-analysis has given a systematic theory of the unconscious. Freud arrived at the theory of the unconscious by his study of hysterical patients and analysis of dreams. Mental life for him has two parts, the conscious, which is the organ of perception, and the unconscious.⁴⁷ The unconscious is ordinarily inaccessible. It is that which is not conscious. It is the depth which contains all the dynamically repressed wishes, mainly sexual in nature. Freud analyses the causation of neurosis and interprets dreams with the help of the unconscious. Even normal forgetting is explained on these lines, Hartmann's unconscious is a metaphysical principle. It is the absolute principle, the force which is operative in the inorganic, the organic and the mental alike. It is the unity of idea and will. It exists independently of space, time and existence.

The Jaina thinkers were aware of the unconscious, although a clear scientific formulation was not possible for them in those times owing to lack of experimental investigations. Nandisūtra gives a picture of the unconscious in the mallaka dṛṣṭānta, (example of the earthen pot). A man takes an earthen pot from the potter and pours a drop of water into it. The water is absorbed. Then he goes on pouring drop after drop continuously. After some time, when many drops have been absorbed, a stage will come when the water begins to be visible. This example gives a clear picture of the vast depth of the unconscious which absorbs

⁴⁷ Miller (J.C.): Unconsciousness, Ch. I Also refer to Broad (C. D.) Mind and its Place in Nature, Ch. 10.

⁴⁸ Nandrsütra 34.

all our wishes and ideas, although the example was meant to explain the process of avagraha. Buddhist psychology recognizes the unconscious life. It is called vidhimutta, while vidhicitta is the waking consciousness. two are divided by a threshold of consciousness, manodvāra. Similarly, bhāvānga subjectively viewed is subconscious existence, though objectively it is sometimes taken to mean nirvana. 40 Mrs. Rhys Davids says that the consciousness is only an intermittent series of psychic throbs associated with a living organism beating out their coming-to-know through one brief span of life. 50 Similarly, the idea of the unconscious is implicit in the conception of the four states of consciousness in the various schools of Indian thought. In the Māndūkyopanisad we get a description of waking, dreaming, dreamless sleep, and the highest stage, turiya. In the dreaming and dreamless states of sleep there is the implicit awareness of the self. 51 All the orthodox systems of Indian thought accept this distinction of the levels of consciousness. This implies the presence of the unconscious state of which we are not at the moment aware.

In modern psychology, the idea of the unconscious underwent modifications at the hands of Jung. Jung used the word unconscious in He made a distinction between the personal unconscious a wider sense. and the collective unconscious. The personal unconscious contains repressed wishes, forgotten memories and all that is learned unconsciously, Deeper than the personal unconscious is the collective or racial unconscious, the common groundwork of humanity out of which each individual develops his personal and unconscious life. The collective unconscious is inherited in the structure of the organism including the brain structure which predisposes the individual to think and act as the human race has thought and acted through countless generations. collective unconscious includes the instincts and also the archetypes. Archetypes are the primordial ways of thinking submerged in the waking An archetype becomes an idea when it is made conscious. new discoveries in science and the creative work of scientists arise out of this treasure-house of primordial images. 52 There is nothing to prevent us from thinking that certain archetypes exist even in animals. grounded in the peculiarities of the living organism itself; therefore, they are direct expressions of life whose nature cannot be further explained.

The doctrine of karma presented by Indian thinkers and systematically worked out by the Jainas may be aptly compared to the collective or racial unconscious of Jung, more specially of the archetypes of the collective unconscious, although the karma theory has a metaphysical

⁴⁹ Radhakrishnan (8): Indian Philosophy, II Edn., Vol. I, p. 408 (f. note).

⁵⁰ Rhys Davids (Mrs.): Buddhist Psychology, p. 116 (1936).

⁵¹ Mändükyopanisad, 2. 7.

⁵² Jung (C.G.): Two Essays on Analytical Psychology: Tr. from German by R.F.S. Hull, p. 67-68 (1953).

The Jainas have given a more elaborate and scientific theory of The law of karma is the ultimate determinant of various courses of life both physical and mental. In fact, our physical stature and our birth in particular social surroundings is the result of the karma we have accumulated. The karmic matter goes on accumulating with the deeds The innate faculty of the soul is obscured by the particles of karma as the luminous light of the sun is obscured by the veil of clouds or This obscuration is beginningless although it has an end. karma that binds us is both physical and psychical in nature. The physical karma is material in nature, while the psychical karma comprises those psychic effects and states which are produced in the soul owing to the influx of the physical karma. Karmic atoms are classified into eight types⁵⁸. Jhanāvarnīya karma obscures the cognitive faculties. Darśanāvarnīya karma obscures the intuitive faculty. Mohaniya karma deludes us. Similarly, specific types of karma determine our age, our physique, the states, and even the power and activity of life. The force of karma works implicitly and makes us what we are in both body and mind. Thus, it was suggested, the operation of karma can be compared to the operation of the collective or racial unconscious. The collective unconscious stands for the objective psyche. In his more recent essays, Jung writes: "The contents of archetypical character are manifestations of a process in the collective unconscious. Hence, they do not refer to anything that is or has been conscious, but to something essentially unconscious",54 Elsewhere, Jung writes that the personal layer ends at the earliest memories of infancy, but the collective layer comprises the pre-infantile period that is the residue of ancestral life. It contains the archetypes of very ancient images. He says that it is possible to find the karmic factor in the archetypes of the unconscious. "The karma aspect is essential to the deeper understanding of the nature of an archetype".55 It is sometimes suggested that the comparison between the operation of karma and that of the collective unconscious is inadequate. There is no question of common inheritance except in the physical make up. Each individual has his peculiar karma prakrti, which cannot be derived from common inheritance. It may, however, be pointed out that the archetypes do refer to the common heritage that each individual shares with his community.

However, Jung developed the concept of the collective unconscious on the psychological plane with reference to the psycho-analytical study of the interpretation of dreams and fantasy. From this side, the

⁵³ Note. Gommatusăra, Karına-kānda gives a detailed analysis of karma.
Also refor to Glassenapp fr. (Ton): The Doctrine of Karma in Jaina Philosophy.

⁵⁴ Jung (C. G.) Introduction to a Science of Mythology, p. 104.

⁵⁵ Jung (C G.) Two Resays on Analytical Psychology Personal and the collective (or transcendental unconscious), p. 76. foot note

archteypes are fundamental patterns of symbol formation. Had he developed the archetypes of the collective unconscious, he would have reached the doctrine of *karma*, the store-house of the physical and psychical effects of the past. He would have realized that the force of the unconscious is the force of *karma* which determines the future course of life.

The metaphysical state of the unconscious has been an equally important problem for the philosophers. In the development of Indian thought three distinct views can be stated: (i) there is no entity such as consciousness. The unconscious alone exists. This is the view presented by the materialists. This view is associated with the Cārvāka view. (ii) Consciousness alone exists. There is nothing like the unconscious. This view is expressed by the monistic idealists of the Vedānta. The Vedāntist believes that there is nothing but consciousness, or the cit, which wrongly superimposes unconsciousness upon itself by making an object of itself The unconscious is created by the process of self-objectification. The appearance of the pure consciousness is due to its reflection in its limiting adjuncts. The pure cit wrongly identifies itself with the varying forms of the limiting adjuncts, as the moon in the water appears shaking because of the water shaking.

Similarly, the all-pervading cit may be limited by manas, buddhi and ahainkāra, as the ākāśa which, though unbounded, is spoken of as bound according as it takes the form of a jug or a cloud. The unconscious is only the self-limitation of the limitless. Again, some Vedantists maintain that the unconscious is due to the limitation of consciousness through the nescience of avidva, and discriminative knowledge removes this veil of the unconscious, as the son of Kunti was known as the son of Rādhā and was believed to belong to a low caste because he was brought up in such a family.56 However, the Vedantin accepts that from the practical point of view, things exist outside our consciousness and there exists a realm of unconscious in our midst. But it is due to the fact that our consciousness has not yet attained its highest stage of possibility. But when the range of consciousness is so widened as to include the realm of the subconscious and the unconscious, then it becomes identical with the universal consciousness in which there is nothing except itself. unconscious is only the receding and vanishing point of consciousness which alone exists as a permanent reality.⁵⁷ This is the picture of the monists.

The dualists maintain that consciousness and the unconscious exist side by side and independently. This is the view of the Sāmkhya and the Yoga philosophy. Puruṣa is conscious and prakṛti is unconscious. They meet to create experience. The puruṣa is reflected in the buddhi which is

⁵⁶ Sıddhäntatarkasamgraha, p. 158,

⁵⁷ Saksena (S. K.): The Nature of Consciousness in Hindu Philosophy, p. 166.

unconscious, just as a face is reflected in a mirror. Vijnanabhiksu maintains that the reflection is mutual, because the buddhi is reflected back in The unconscious buddhi seems to be conscious owing to its proximity to the conscious purusa. But the Jaina philosophers have shown some of the defects of this theory. Acarya Hemacandra has said of the Sāmkhya Yoga doctrine that in it consciousness does not know objects, the buddhi is unconscious and what else would be more self-contradictory than this? 58 Vidyanandi says that, the purusa being of the nature of nonknowledge, how could Kapila be the instructor of truth even like one in deep sleep? The prakṛti is also unconscious and like a jar it cannot fulfill The Jaina admits with the Vedantin the the function of instruction. possibility of pure consciousness at least in the final state of emancipation, because consciousness is the very essence of the soul. Even in the stage of bondage there is not a single moment in which the self ceases to be conscious. Bondage is the limitation of consciousness by means of the veil of karma and what comes through the channel of the senses. Karma is the unconscious principle which veils right knowledge and right intui-Ignorance and delusion are not, then, innate but are produced through the influx of karma. The senses are rather handicaps than instruments of knowledge. In omniscience, the self and its consciousness are released from its barriers and the self attains omniscience. However, the Jainas do not believe that the limitation to consciousness is illusory. It is a fact in the empirical world.

In Western thought, Hartmann gave importance to the unconscious. He said that the human mind is determined by the 'unconscious in love', 'unconscious in feeling' and the 'unconscious in character and morality'. For him, the unconscious is the absolute principle active in all things, the force which is operative in the inorganic, organic and mental alike yet not revealed in consciousness. It is the unity of unconscious representations and will, the idea and the will. The unconscious exists independently of space, time and individual existence, timeless before the being of the world. For us, it is the unconscious in itself; it is the superconscious.⁵⁹

Note on Pasyatta.

The ancient Jaina literature describes upayoga and along with it, also mentions paśyattā. Prajñāpanāsūtra recognizes a peculiar mental force called pāsaṇavā, which is rendered as paśattyā in Sanskrit. There is a description which states that both upayoga and pāsanaya can be sākāra and anākāra. It means that jūāna and darśana belong to both paśyattā and upayoga. Paśyattā originally corresponded to drs and now connotes

⁵⁸ Tattvārthasūtra, I, v, as quoted by Tatia N.) in his Studies in Jaina Philosophy. p. 159.

⁵⁹ Dictionary of Psychology and Philosophy Vol. II. 'Unconscious'.

⁶⁰ Prajňāpanāsūtra, 29, 30.

*prolonged vision' with reference to determinate knowledge, and clear vision with reference to intuition.⁶¹

Distinguishing between upayoga and paśyattā, the commentator Malayagiri says that sākāra upayoga consists of five classes of knowledge mati, śruta, avadhi, manah-paryāya and kevala jñāna, and also three types of wrong cognition: kumati, kuśruta and avadhi-ajñāna; while sākāra paśyattā consists of six classes because matifiana and matifiana, are not included Similarly, anākāra upayoga is darsana. It has four types: caksudarsana (visual), acaksudarsana (intuition which is due to the mind and other sense organs except the eyes), avadhidarsana and kevaladarsana, Anākāra paśyattā, on the other hand, consists only of three classes, because ucaksudaršuna, which is devoid of clear vision, cannot possess pašvattā.62 Pasyattā thus means prolonged vision or clear vision. However, the clear meaning is not stated, although their sub-divisions are mentioned. distinction between upayoga and pasyanta and their sub-divisions canot be dismissed as mere fancy of the ancient philosophers. We have analysed upayoga as horme, the psychic force in life. Similarly, it would be possible to say that the ancient Jaina philosophers were aware of the psychic force which holds our experience and which later becomes the basis for Mneme is the first general property of the mind. 88 It is the power of the mind by which the past is retained. Ross says that it is the general truth of living organisms that all life processes leave behind the modification of structure, both in the individual and the racial sense. In our mental structure are conserved the after-effects of all our individual experiences and probably many of the experiences of our ancestors also.64 The same idea is incorporated in the theory of Anemnesis in Plato's Dialogues Meno.65 Knowledge is attained by the recollection in one's life of realities and truths seen and known by the soul before its incarnation. But Mneme is not to be identified with memory, although memory is possible through the mnemic force, which is wider than memory. Memory is mneme raising to the level of awareness. 'When I recognize my friend in the street I do not say that I remember his face; but again my recognition is possible in virtue of past experience in which my friend has figured, and it is therefore a manifestation of mneme'.66 It is possible that lower animals have the power of mneme. In the lower animals also it operates both in the individual and the racial sense. Birds build their nests after the racial pattern and they cross the sea at particular places.

⁶¹ Malayagiri's commentary on Prayhāpanasūtra, pada 30 as quoted by Tatia (N.) in his Studies in Jaina Philosophy, p. 71.

⁶² op. cit. pada 30.

⁶³ Nunn (T. P.): Education, ats Data and First Principles, 3rd Ed., p. 24.

⁶⁴ Ross (James): Groundwork of Educational Psychology, p. 44 (1951).

^{65 &#}x27;Meno' 81, a.

⁶⁶ Ross (James): Groundwork of Educational Psychology, page 45 (1951).

From the analysis of mneme given above, it appears that similar ideas, though in a more simple manner, must have influenced the Jaina philosophers to point out the presence of paśyattā as distinct from upayoga, which is the life force for conscious experience. In the divisions of pasyattā given by Malayagıri, it is mentioned that pasyattā has no mati jñāna and mati ajñāna as its forms. Matijñāna is direct sense experience which arises from the contact of the sense organs with an object, although knowledge due to mind is also included in matijñāna. Hence, paśyattā would not include the formation of direct sense experience, although other forms of experience are included. Therefore, it would not be inappropritate to say that paśyattā is the power of the mind by which we retain our experiences and which becomes the basis for more experiences. However, we should not forget the fact that the ancient Jaina philosophers, as all other ancient Indian philosophers, were not clearly aware of the psychological significance of the problem. Theirs was insight and philosophic speculation.

CHAPTER IV

THE SENSE ORGANS AND THE SENSES

The soul gets embodied through the accumulation of karma. Then starts the wheel of sainsāra The embodied soul comes into contact with the objects of the world and tries to grasp the nature of things through the specialized sources of the body. They are the sense organs.

The Jama thinkers, like other ancient philosophers of India, recognized two varieties of comprehension—sensory and extra-sensory. Sensory comprehension is conditioned by the senses and the mind, whereas extra-sensory comprehension occurs directly in the pure consciousness. Sensory comprehension is possible through the sense organs. The sense organs are very often considered as windows through which the soul cognizes the external world. In Ganadharavada we get a description of the process of cognition as coming out through the senses, as Devadatta looks through the five windows of his palace. 1 Pañcāstikāvasāra describes the function of the sense in a similar way. The sense organs are denoted by the word indriya, and indriya refers to the instrumental nature of the source of knowledge. There are two ways in which the word indriva can be looked at. Indriva is referred to as the capacity of experience: it is paramaiśvarya upabhoga samartha. It is also referred to as that through which experience is possible: idvate iti indrivam. * The Jaina philosophers called such cognition paroksa jñāna (indirect knowledge), because it comes through the sense organs, which are different from the Later, it began to be called samvyavahāra pratyaksa. 8 The Jainas considered that the indrivas are impediments to the attainment of pure consciousness and also to the purification of the soul. Indriyas are the source through which karma can flow in, and the source of empirical In the *Upanisads*, the nature and function of the sense organs have been described. The Atman was first alone. He knew. self-conscious. Then he became embodied. The sense organs became instruments through which experience is possible. Regarding the number of sense organs, Prajapati is said to have described sixteen parts of the body.4 In the Prasna Upanisad the parts are enumerated. The indrivas are considered as one. The Svetāsvatara Upanisad also gives such a classification. The distinction between the sense organs, jñānendriyas,

¹ Gaņadharavāda: Discussion with the Third Ganadhers Vāyubhūti. Also refer to Sūtra-kṛtānga, 33. (Commentary).

² Abhidhanarajendra, Vol. II, p. 548.

³ Vićesāvašyakabhāsya, 95.

⁴ Praina Upanisads as quoted by Deussen in Philosophy of the Upanisads, p. 268.

and motor organs, karmendriyas, was made later. The name of indriya for an organ of sense was first mentioned in the Kauṣītaki Upaniṣad. In the Praśna Upaniṣad the ten indriyas were subordinated to the manas as the central organ. In the Maitri Upaniṣad, the jñānendriyas are described as the five reins; the motor organs (karmendriyas), are the horses; manas is the driver: prakṛti is the whip; 5 the vocal organ, the prehensive organ, the locomotive organ, the evacuative organ and the generative organ are the five karmendriyas.

The Buddhists recognize six varieties of consciousness, visual, olfactory, gustatory, tactile, and purely mental. Then there are six $\bar{a}\dot{s}rayas$, the repositories of the functions of the senses. They are the visual, auditory, olfactory, gustatory and tactual organs, and also the mind. The five sense organs are made up of the five elements.

But, following the tradition of the Upanisadic thought as in the Prasnu and Maitri, the Sārhkhya philosophers mentioned the organs and manus, which are instruments of the soul for experience and activity. They have mentioned five sense organs, five motor organs, and manas. 6 Sometimes, thirteen organs are mentioned, including ahamkara and buddhi. In that case, mind, ahainkāra, and buddhi are the internal organs, called antahkarana, and the other ten are the external organs. The sense organs are not the products of gross matter but of ahanikāra Ahainkāra is psycho-physical in nature. The functions of the sense organs are sensory in nature. They are concerned with getting experience. They are, therefore, called jñānendriyas The function of the motor organs is bodily activity. They are, therefore, called karmendrivas. The functions of the two can be compared to the afferent and efferent nervous systems. the evolution of life from ahanikara, the manas, the sense organs and the motor organs are developed out of the preponderance of sattva. 'Tanmātrās' are due to tamas. Rajas is the force which gives impetus to sattva and tamas. But Vijñānabhikṣu says that mind alone is due to sattva, while the sense organs and the motor organs have evolved out of Rajas. The internal organs are described as the main gate-keepers, while external sense organs are the subordinate gate-keepers.

Samkara accepts the view that there are eleven organs (*indriyas*) five sense organs (*jñūnendriyas*), five motor organs (*karmendriyas*), and one internal organ (*antaḥkaraṇa*). The *antaḥkaraṇa* assumes different forms according to the diverse functions it takes. For instance, the function of *manas* is doubt, the function of *buddhi* is determination. Ahamkāra is ego consciousness, and *citta* is concerned with recollection. The five sense organs are made of elements like earth, water, air, fire and ākāśa. The *sattvic* part is predominant in the *jñānendriyas*. The *rajas* part predominates

⁵ Mastri Upanisad, 2.6.

⁶ Vijhanabhikşu: Sāmkhya-pravacana-bhāṣya.

in the karmendriyas. The internal organs are made up of the sattvic part and the five elements combined.

The Jainas have accepted the five sense organs alone, although the mind is considered as a quasi-sense organ, a no-indriya. The motor organs are recognized as instruments of experience and behaviour. The Jainas argue that, if motor organs were to be recognized as indriyas only because they are instruments of special types of physical function, then the number of indriyas would have to be extended indefinitely. The Jainas treat as indriyas only those which are the conditions of specific cognition.

Zimmer says that, according to the Jainas, the life monads enjoying the highest states of being, human or divine, are possessed of five sense faculties as well as of a thinking faculty (manas), and the span of life ($\bar{a}yus$), physical strength ($k\bar{a}ya\ bala$), power of speech($v\bar{a}c\bar{a}\ bala$), and the power of respiration ($\dot{s}v\bar{a}sochv\bar{a}sa\ bala$). In the $S\bar{a}mkhya\ Yoga$ and the Vedānta systems, five faculties of action (karmendriyas), are added to the five sense faculties. The karmendriyas are analogous to the Jaina idea of bala. 'Apparently, the Jaina categories represent a comparatively primitive archaic analysis and description of human nature, many of the details of which underlie and remain incorporated in the later classic Indian view'. 9

The Nyāya system has similar arguments against the recognition of motor organs as indriyas. Jayanta maintains that if the tongue, hands and feet etc., are regarded as indriyas, many other organs should also be admitted as such. The function of swallowing food is discharged by the throat. The breast performs the function of embracing. The shoulders carry burden. All these should, then, be recognized as organs or indriyas. Again, the function of one sense organ cannot be discharged by another. For instance, visual cognition is not possible without eyes. But that is not the case with motor organs. A person grasps things with his hands, but can also walk a little with his hands. If the different parts of the body doing different functions are included among motor organs, the throat, the breast and the shoulders would all be motor organs. The Jainas made the same point. In fact, the Jainas say that all motor organs can be included in the tactual sense organ.

Even in the West, the problem of classification of the sense organs has been very old. It very often depends on the view taken of the sensations originating in the skin and the internal organs of the body. Traditionally, there are five special senses: vision, audition, smell, taste, and touch or feeling. Aristotle mentioned the five senses, although he expressed

⁷ Pramāņamīmāmsā, I. 121. 79. line 20 'cestāvišesānāmunantattvāt'

⁸ Op. cit. 79. line 19. 'Jñānaviśeşahet lināmevehendriyatvenādhik ştattvāt'.

⁹ Zimmer: Philosophies of India, Ed. by Campbell, p. 228.

¹⁰ Nyaya Munjari, p 482-83

¹¹ Tattvärthaslokavärttika, p. 326.

some doubt about touch as a single sense. Current popular usage is in the Aristotelian tradition. However, at different times, specially of recent years, the list has been expanded. The 'extra' senses have come out of the sense of feeling by the process of sub-division. Boring, listing the sense qualities of feeling, includes pressure and other factors in the sense of In the history of classification of the senses, there have been in general three logically distinct approaches. They may be grouped together (1) qualitatively, on the basis of observational similarity; (ii) stimulus-wise, with respect to the object or forms of physical energy that logically set them off; and (iii) anatomicaly, in accordance with the system of sense organs. Geldard says that the anatomical basis seems to provide the best organizational principle. For instance, we could talk of the sense of green and the sense of grey, but since we know that the production of these qualities is the work of a single anatomical unit, the eye, we are accustomed to group the two classes of sense experiences together as visual.13

Modern physiology matntains that all movement is due to the activity of the muscles. Muscles are made of bundles of contractile fibres by which movements are effected. There are three types of muscles: (i) skeletal muscles, (ii) smooth muscles, and (iii) cardiac muscles. Cardiac muscles are controlled by the nervous system, and are located in the heart. Skeletal muscles have a much wider distribution. They are attached to the bones of the skeleton, making bodily movement possible. Smooth muscles are found in many of the internal organs, as in the stomach walls and in the iris of the eye. Reflex and voluntary movements are possible because of muscles. In man, muscles are controlled by the nervous system. The nervous system consists of a mechanism for perceiving change in the environment, and another for reacting to the environment 14 Thus, all physiological functions are possible owing to the stimulation of the afferent nervous system which reacts through efferant nerves by using the muscles and tendons in its In this sense, it could well be said that all physical functions may arise out of the sense of touch. In invertebrate animals like the protozoa, the chemical sense seems to be the only sense for all experience and activity. Scientists are not agreed on the question whether these animals show reactions owing to the chemical sense or to the mechanical stimulation. Schaeffer thinks that it is due to mecha-Metalnikov believes that the discrimination is a nical stimulation. chemical one.15 The same problem continues to vex scientists in the case of animals like the coelenterates, flat worms, annelids, molluscs

¹² Goldard (F A.): The Human Senses, p 159.

¹³ Op cit. p. 160,

¹⁴ Langley and Cheraskin: Physiology of Man. Ch. 3.

¹⁵ Washburn (Margaret F.): The Animal Mind, p 60

even up to the insect level. Thus, we find that in the case of the lower animals, especially the invertebrates, the sense of touch appears to be predominant and to be the source of all experience and activity.

The Jaina philosophers, as pointed out earlier, showed that all motor organs can be reduced to experiences due to the sense of touch. However, this does not mean that the anceint Jaina philosophers scientifically annalysed the physiological processes of motor responses. Knowledge of physiology had not developed to the stage required for such analysis. But their insight showed them that all bodily functions including those of speech, excretion and reproduction, are reducible to muscular movement due to the nervous stimulation and response.

It is for this reason that the senses were regarded as mutually identical when looked at from the standpoint of unity of substance. They had all of them fundamental identity. All of them involved neural responses. But this identity is not absolute. They were regarded as numerically different from another point of view. Their specific functions were different. This attitude is due to the catholic outlook of the Jainas, which made them ready to accept all correct points of view, however they differed from their own. This is due to the anekānta vāda of the Jainas. If the sense organs were identical, then the organ of touch would experience taste and the rest also. In that case, the other organs would be superfluous. Further, the perfection of, or partial injury to, one organ would similarly affect the other sense organs. Similarly, if the difference between the sense organs were absolute, they could not possibly cooperate in giving a synthetic judgment, like 'I see what I touch'.17 For instance, we very often get an experience like, 'I see the ice is cold'.

But we cannot attribute to the ancient Jaina philosophers experimental acumen in the physiological and psychological analysis of the nature of sense organs. This analysis was more from the metaphysical point of view. The Jainas accepted the identity and also the diversity of the sense organs because of their logical outlook. Their non-absolutist anekānta attitude to the problems of life gave them insight to find the truth in the different views presented. Thus, the analysis of the sense organs presented by the Jaina philosophers was more a result of philosophic insight than of scientific analysis. However, it cannot be denied that the analysis comes nearer to the description of the senses and their distinctions given by the modern physiologists, althogh the Jainas were not aware of the experimental and analytic basis required for such a description.

¹⁶ Tattvärthaslokavärtteka.

¹⁷ Pramāņamīmāmsā, Commentry I. 1. 21. 80.

The Jama analysis of the structure and functions of the sense organs is unique and deserves study with reference to the problems of modern physiology. It is not possible for us to go into the details of the analysis of the sense organs in the light of the discoveries of modern physiology, as it would be outside the scope of the present work. However, a brief survey of such comparative analysis is necessary.

The senses are called *indrivas* because they have been produced by *indra*, which means karma. They are the manifestations of namakarma, which is the karma which determines the nature and composition of our organism. The nāma-karma determines what body we shall get, whether a human body or the body of a lower animal. the physiological defects of individuals are due to this karma. nature and functions of the sense organs are determined by the nāmakarma. The sense organs serve as organs of perception of objects for a soul which is polluted with karma. The soul in a state of such pollution would not be able to get the direct knowledge due to its own nature and pure consciousness, for it is clouded by the knowledge-obscuringjñānāvaranīva—and intuition-obscuring—darkanāvaranīya karma. In such an embodied state of the soul, experience and knowledge are possible only through the instrumentality of sense organs. Therefore, sense organs are the means through which empirical knowledge is possible.

According to the Jamas there are five sense organs like the tactual, the gustatory, the olfactory, the visual, and the auditory Each of these has its own characteristic capacity of experiencing touch, taste, smell, colour, and sound. Each of these organs is structurally of two parts, the physical and the psychical. The physical part of the sense organ is called dravyendriva The psychical part is called bhavendriva.18 The physical part of the sense organs is caused by the rise of the corresponding nāma-karma. The psychical part of the sense organs is caused by the destruction and subsidence of the knowledge-obscuring karma, jñūnāvaranīya karma. Each of these two parts is again sub-divided in two parts as: dravyendriya is divided into (i) nivitti and (ii) upakaraņa. Nivrtti is the organ itself and upakarana is the protective physical cover like the eye-lid in the case of the eye. Each of these two, again, is sub-divided in two parts: antaringa and bahiranga --internal and external. The internal part (antaranga), is very often talked of as soul itself. is to be identified with the psychic element which is necessary for any It permeates the whole sense organ. Bahiraiga (the external sense part), is the material which is permeated by the psychic element. In the case of upakarana, the protective cover like the eye-lid is the hahiranga. The matter immediately surrounding the eye may be identified with the antaraiga of the physical part of the sense organ,

D Pramānamimāmsā, 1, and 21,

although it is possible to say that in all cases the antaranga refers to the psychic element present in the sense organs and necessary for sense experience. However, it would be more appropriate to speak of the antaranga of the material sense organ in terms of the material only; and, in that sense, it would be apter to say that the antaranga of the dravyendriva refers to the matter that is inside the sense organ and is permeated by the psychic element. For instance, we compare this to the cornea of the eye. In fact, we may also include the vitreous humour in the eye.

The bhavendriya, the psychic part of the sense organ, is also divided into two parts: (i) labdhi, and (ii) upayoga. 19 Labdhi is the manifestation of the specific sense experience due to the destruction and subsidence of the knowledge-obscuring karma. In fact, it may be said to refer to the removal of the psychic impediments which have to be eliminated if sense experience is to be possible. These impediments are not physical, like insufficiency of light in the case of vision, but psychic, in the case of the sense experience itself. Upavoga is the psychic force determining the specific sense experience coming out of the contact of the specific sense organ with the object of stimulation. It is the force of horme operating in all psychic life and especially operating in a specific way in the determination of the sense experience. The word horme has been used ealier as the psychic force which determines our experience This force operates in a specific sense experience, like sight, hearing, smell, taste and touch. Although upayoga is the common force necessary for all these experiences, it gives rise to different experiences in the different senses, because it gets specific expressions from the physiological and psychic conditions differently presented. A general table of the distinction of the structure of the sense organs is given in table 2. It is based on the analysis of the structure of the sense organs as given by the Jainas. The details of the structure are worked out on the basis of the description given by Umāsvāti in Tattvārthasūtra²⁰ Chapter II.

Thus, the Jainas make a distinction between the physical structure and the psychic element involved in the sense organs. The physical part is the organ itself. It is the physiological instrument through which the individual receives the sense impressions. The outer part of the structure is the protective organ. It also facilitates the reception of the external stimulation. The internal part of the structure refers to the sensory nerves and the humours as in the case of the eye.

¹⁹ Ācārānga—Sutru, 2 a and Prajňāpanā, 1 'lubdhe upayoga bhāvendreyam'.

^{20 (}a) Tattvārtha Sūtra, Ch. H. Sūtras, 16, 17 and 18

⁽b) Also refer to Abhidhanardjendra, Vol. 2. p 445.

⁽e) Tarkasamgraha, Ed. by Athalye Notes at the end,

⁽d) Prmāņamīmāmsā, 1. 21, 22, 23.

It is the antaranga. Niviti is the internal physiological composition of the sense organ. Upayoga is the hormic force which is responsible for the sense experience. Labdhi is the manifestation of the horme in order to produce a specific sense experience under suitable psychic and physiological conditions.

The Jainas have given a detailed analysis of the structure of the different sense organs. For instance, the internal part of the sense of hearing is like the kadamba flower or like a ball of flesh, māmsagolā-kāra. The internal eye is of the size of a grain of corn, dhānya masūrākūra. The sense organ of smell is like a flower, mukta kusuma candra. The organ of taste is like the edge of a knife. The sense of touch is of various forms. Similar descriptions can be given regarding the upakaraṇa or protective cover of the organ. For instance, the external part of the organ of taste consists of a collection of clear particles of matter, svecchatara pudgala samūha.21

The spread-outness of the sense organs is another problem mentioned by the Jainas.²² The eye is the smallest. The organ of hearing is also small, but it is bigger than the eye. Sometimes it expands when it hears loud sounds. The organ of smell occupies the largest space. However, it is limited in extent. If it were unlimited in extent, experience of smell would be possible even when the object touches any part of the body. But this is not the fact. The organ of taste has greater extent, although it is still limited, angula mita. However, the sense organ of touch is unlimited in extent. It pervades the whole body. It is śarīra vyāpaka. Thus the sense of touch is considered by the Jainas as primary in one more sense. It is possible in any part of the body.

Modern psychologists point out that the sense organ of touch is really unlimited in extent, because it gives rise to various sense expreriences like pressure, temperature and organic pain. In fact, even the internal parts of the organism give us experiences which are reducible to the experience due to tactile stimulation. Organic pains like stomach-ache are, in fact, species of the experience of touch. In this sense, all sense experiences can be reduced to the tactile sense experience. The Jainas can be said to be justified in giving primacy to the sense of touch.

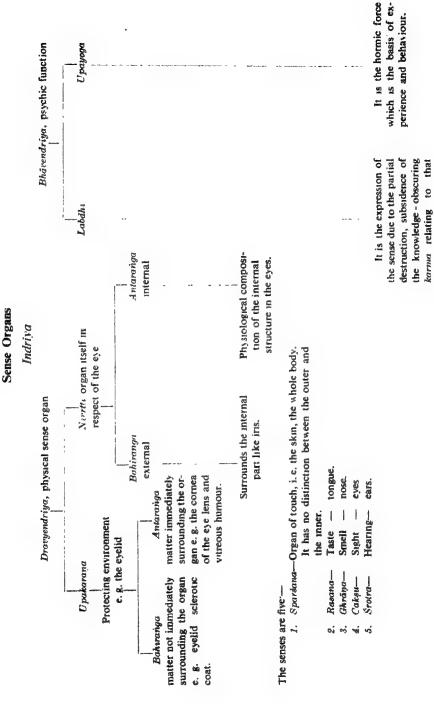
The Jaina description of the different parts of the organs may well be compared to the description of the sense organs given by modern physiologists, although the latter have given an accurate and detailed analysis of the structure of sense organs based on experimental investigations. We may, however, note that experimental investigation was

²¹ Abhidhānaiājendra, Vol. 2. Indriyo.

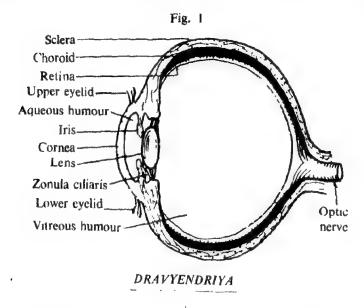
²² Projhāpanāsūtra, 15.

sense.

TABLE No. II



not possible in those days. Modern physiologists say that the vision is far more complex than any other sense organ. We may take the example of the anatomy of the human eye for comparison. Fig. 1 shows the comparative picture of the anatomy of the human eye according to the modern physiological and the Jaina view.²⁸ The outer layer



BAHIRANGA

Upakarana includes protective cover. Includes eyelids and selerotic coat.

Nivrtti of Dravyendriya is compared to the matter that surrounds the internal part. Iris may be included in this. ANTARANGA

Includes aqueous humour and choroid coat.

Shows the physiological internal composition of the sense organ. It includes retina, vitreous humour and lens.

of the material sense organ of the eye consists of a tough resistant material which is termed sclera. This material gives substance to the eye-ball. The most forward part of the sclera is transparent. It is called cornea. It is a tough resistant material which permits the passage of light rays and protects the eye. The eye-lids and the sclera may

²³ Langley and Cheraskin The Physiology of Man p 97, and Human Senses by Goldard. 11-180.

together be compared to the outer protective cover of the structure of the dravyendriya. It is the upakarana of the eye. In fact, eyelids are the outer part and the cornea is the inner part. On the inside of the back is the retina which is most important. It is a system of highly specialized nerve cells. The cells are receptors sensitive to light. image is focussed upon this layer. The retina consists of two types of nerve cells, rods and cones. Then we have the lens, which is transparent, consisting of a semi-solid substance enveloped by a thin capsule. Just in front of the lense is the thin muscular layer of the iris. It has an opening at the centre through which the light rays may pass. This circular aperture is the pupil of the eye. The lens, the iris and the pupil can be compared to the nivrtti, specially to the external part of the nivrtti. The retina and the vitreous humour may be compared to the internal part of the nivrtti. Similarly, the aqueous humour between the cornea and the lens may also be included in this.

The physiologists do not account for the psychic part of the sense organ which has been calld bhavendriva. It refers to the psychic factors which are necessary conditions for the sense organs giving the sense experience. The basic psychological factor required for the sense experience of the specific sense organ is the psychic force, the horme, which has been called the upuvoga. This force is operating in all experience and behaviour and is responsible for the specific sense experience. But, before we get a sense experience, like sight, certain psychological impediments have to be removed. For instance, diversion of attention, and subjective conditions like prejudice and bias, have to be minimised if we are to get a correct sense experience. For instance, as Munn says, for every sense experience we have a mental set which determines a type of the specific sense experience that we get.24 This set This psychological factor may be may be inherited or acquired. compared to the labdhi of the bhavendriya, which is the expression of the hormic force in the specific form due to the partial destruction and subsidence of the knowledge-obscuring karmas relating to that sense.

The problem of the contact of the sense organs with the object of stimulation is an important one in Indian thought. It has a great psychological significance. Almost all the systems of Indian thought were aware of this problem and have expressed themselves in one form or another. The Nyāya Vaišeṣika, the Sāmkhya, the Mīmāmsaka and the Vedānta schools of thought believe that all the sense organs get sensory experience through direct contact of the object of stimulation

²⁴ Munn: Psychology, p. 310-311

Drever defines 'set' as a temporary condition of the organism facilitating a certain more or less specific type of activity or response, as in mental set or neural set-Dictionary of Psychology.

with the sense organ. This refers to the physical contact of the object of stimulation with the sense organ and the sense organs having such contact are called prāpyakāri. The sense organs in which there is no such physical contact with the external stimulations are called aprapyakāri. According to the orthodox systems of Indian philosophy mentioned above, the sense organs are prāpyakāri because there is physical contact with the stimulation. In fact, it is maintained by them that the sense organs move out to the object in the form of vytti, or modification, and by taking in their form apprehend them. The Buddhists believe that the visual sense organ and the auditory sense organ cognize their objects without coming into direct contact with them. They are aprāpyakāri. For all of them, however, the mind is aprāpyakāri, because it does not come in direct contact with the object. The Jainas maintain that the visual organ, like the mind, is aprāpvakāri, because it does not come in contact with the object. For instance, we get visual experience of the moon and mountains alike. According to the Jainas, the eye does not go round to the mountain and then fix a point to form the vitti, nor does it go round the stars and then fix on the moon to get the experience. Such a movement of the eye round the objects of stimulation is absurd, and it contradicts our experience. The Jainas say that light and darkness do not involve the eye going out to see light. Moreover, the eye is not an external organ, bahvendriya.25 The Jamas maintain that it is not true to say that there is a physical contact either of the nature of anugraha or upaghāta for the eye. Seeing the blazing sun is not upaghāta, because the eye is the organ of light (tejasendriya); and matter of the same nature does not bring anugraha and upaghāta But the eye is not active while seeing the sun after the clouds have gone because there is deficiency of light. The rays in the eyes are few compared to the abounding rays of the sun. However, when we see the blazing sun our eyes do not ache.

The Sarnkhyāyikas object to maintaining that the eye alone, like the mind, is aprāpyakāri, and the other four sense organs are prāpyakāri. If that were the case, we may as well argue, they say, that all the sense organs are aprāpyakāri, because we, for instance, hear distant sounds and smell the fragrance of a flower from a distance. But the Jamas say that this objection is not convincing. They point out that even those sense organs which are prāpyakāri do not go out to meet the objects for getting experience; the objects themselves come in contact with the sense organs and the sense organs remain where they were. It means that external stimulations, like sound waves, affect the ears and as it result we hear.

²⁵ Abhidhanarajendra, Vol. II, p. 555.

²⁶ Ibid Vol. 11, Indriya, 9, p 558

The Buddhists say that even the ear may be called aprāpyakāri. because we hear from a distance, and as there is no direct contact of the object with the sense organ. It is aprāpyakāri because, in any type of auditory experience there is no physical contact. For instance, a new-born infant will give the same type of response to the stimulation of a loud sound or of a pleasant sound. Eeven if there is thunder, auditory experience may not be possible. But the Jainas say this is not a correct explanation, because in the case of the infant the sense organs are not as vet well adapted and developed. They have not sufficient capacity for grasping the sound. The appropriateness of stimulation is one of the conditions of sensory experience. In the case of hearing, the sound waves are received only when the sense organ is suitably developed and also when other conditions are favourable. That is why they go to the appropriate places, yogya deśāvasthita. For instance, a low tone is not generally heard, but if the beloved speaks in a low tone the lover quickly This refers to the psychological factor of interest which is a condition of specific sense experience. We may include this in the labdhi of the bhavendriya. In the case of the auditory sense, the Jainas point out that, although the ear is a prāpyakāri and although some form of physical contact is necessary for the auditory experience, it is not direct physical contact with the stimulation as in the case of smell or taste. In the case of taste specially, the stimulation is directly physical. The particles of food, for instance, come actually in contact with the tongue. Such direct physical contact is called baddha sprsta.27 The Jainas say that in the case of the auditory sense organ the contact is there but it is indirect. Stimulation like sound waves issuing from the object come in touch with the organ of hearing and we get the auditory experience.

Modern physiologists describe the process of audition in these terms. The sound waves are transmitted through the external auditory meatus to beat against the tympanic membrane. As a result, the tympanic membrane is caused to vibrate in harmony with the frequency of sound waves. The movement of the tympanic membrane in response to sound waves causes the auditory ossicles to move with it. Under normal conditions, sound waves pass through the external auditory meatus and strike the ear-drum. This energy is transmitted to the fluid of the inner ear and the hair cells in the organ of corti are caused to move and initiate an auditory impulse. There are two theories concerning the mechanism by which the movement of the hair cells gives rise to impulses in the auditory nerve: (i) through a microphonic effect, and (ii) through a chemical mediator. At present, evidence is not conclusive for either theory.²⁶

²⁷ Abhidhanarajendra, Vol. II. p. 557.

²⁸ Langley and Cheraskin. Physiology of Man; Chapter on Hearing.

For a detailed description of the theory refer to Comparative Animal Physiology ed. by C. Ladd, Ch. 13. Phono Reception.

Thus, the Jainas believe that the auditory, gustatory, olfactory and tactual sense organs are prāpyakūri, because the contact of the object with the sense organs is due to upaghāta, a gross and subtle physical contact. The touch of a blanket gives the experience of roughness, and contact with the sandal paste gives a sense of coolness. Particles of camphor come in contact with the olfactory sense organs and we experience # smell.²⁹ Similarly, soft sounds give a pleasant experience. But in the case of the eye there is no contact between the sense organ and the object.

On the basis of the analysis of perception given in modern science it is not possible to say that the Jaina view of the aprāpyakāri nature of the visual sense organ is not understandable, because some kind of contact of the external object with the sense organ is necessary even in this experience. But it should be observed that light is only required to illuminate the object and not to serve as a medium between the eye and the object, for the eye can observe the object being itself untouched by the rays of light illumining the object.

However, the problem of the contact of the sense organ with the object was viewed differently by the ancient Indian philosophers. Their problem was to explain the possibility of cognition to the sense organ. The Jainas had a realistic approach, and they refused to believe that the sense organ goes out to meet the object.

C. D. Broad says that hearing is projective in its epistemological aspect, and is emanative in its physical aspect. We may say that sight is ostensibly prehensive and not projective in its epistemological aspect, but is emanative in its physical aspect. Touch is ostensibly prehensive in its epistemological aspect, and is non-emanative in its physical aspect.³⁰

The Jaina analysis of the prāpyakāritva of the sense organ of hearing and the aprāpyakāritva of the sense organ of sight may be compared to the analysis given by Broad, although the epistemological and physical aspects of the problem were not clear to the Jainas in that early stage of knowledge.

Considering the capacity of the sense organs, the Jainas believe that the capacity of the eyes is greater. The eye perceives things like mountains, which are at a distance, and things which are very near, like the parts of the body. But it cannot see the dust in the eyelids. The capacity is limited, because it cannot see things which are beyond a particular limit, like the farthest and the nearest. The Vaisesikas say that it is a defect of the eye. But the Jainas maintain that it is the nature, the svabhāva, of the sense organ. The auditory organ is of a similar nature. But in the case of the ear there is a special power. It grasps sound waves coming from as far as twelve yojanas

²⁹ Karkaśa kambala sparśa. Karpūra pudgala ghrūņs.

³⁰ Broad (C.D.): Religion, Philosophy and Psychoal Research, p. 31,

if the wind is favourable and they are not obstructed. It grasps the sound waves even inside the ear. It is subtler than the sense organ of smell. It receives sound waves of various types, but it grasps only those which are relevant, as the bird picks out milk from a mixture of milk and water—the hainsaksīra.

Modern science recognizes that vision is the most important of all the senses, Blind people learn to depend on other senses to a remarkable degree. But for the loss of vision there is never anything like complete compensation. We rely on vision for protection, for equilibration, for co-ordination, for creation and pleasure. Next comes audition. Then we have olfaction and other sense functions. ranks, perhaps, almost with vision. In the case of man, olfactory acuity has been allowed to be atrophied. The lower animals are far more dependent on their acute sense of smell than we are. Actual survival hinges on the animal's ability to find food and to avoid enemies. some extent this was also the case with primitive man. But as man advanced, the olfactory sense began to get restricted in its use. men use the olfactory sense for pleasure. Audition, like vision, is important for protection, because this sense warns us of danger in the environment. It also adds to our enjoyment. Therefore, it is considered as a vital sense.31

We may refer to the functions of the senses on the different animal levels. According to the Jainas there are gradations of animal life. At the lowest level, there are the one-sensed organisms called They may be earth-bodied, water-bodied, air-bodied and ekendriyas. fire-bodied. This level includes the vegetable kingdom. Many of the organisms are minute or even microscopic. They pervade the whole world. They are described as sakala loka vyāpinah. Some of them may be gross-bodied, and visible. These organisms possess only the sense of touch. No other sensory discrimination has been developed in them. The amoeba, the paramecium and other protozoan animals, similarly coelenterates and even flat-worms, may be included in this list, although the Jamas have not mentioned any specific animal species in this category. Modern comparative psychologists are not agreed on the question of the sensory experience of lower animals. Some maintain that they have a chemical sense. But some scientists like Schaeffer think the reaction of these animals may be due to mechanical stimulation. Even in food-seeking the sense of touch is predominant. ascribed a certian amount of discrimination among mechanical stimuli to the sea-anemones. In the case of planaria maculata, a species of flatworms, Bardeen has suggested that auricular appendages on the animal's

³¹ Also refer to Physiology of Man by Langley and Cheraskin, Chapter—Special Functions.

back near the head end which are specifically sensitive to the touch, may be delicate organs capable of stimulation by slight currents in the water set up by minute organisms that prey on the animal's food, so that the primitive reaction when given to food may be really a response to mechanical stimulation.³²

In the next stage are the two-sensed organisms called They have the sense of touch and taste, which is like the chemical sense, although the chemical sense signifies a combined sense of both touch and taste. Comparative psychologists maintain that rudimentary animals, specially the water-dwelling animals, have smell and taste combined. They call it the chemical sense; for, in the aquatic animals smell and taste are actually the same. Lloyd Morgan has proposed the term 'talaesthetic taste' for the chemical sense of aquatic animals. But it is said that touch gives mechanical stimulation and is present in all The Jainas say that touch is the basic sense. They describe in detail animals possessing the two senses. They give examples of animal species possessing the two senses, For instance, the conch. candanaka, kapardaka, jelūkhi, golaka, and puttaraka, belong to this These are the molluscan species. Among comparative psychologists there is general agreement regarding the presence of the chemical sense in the molluscan animals. Nagel regarded the horn of the marine snails as their most sensitive region. Piéron found that there are three modes of chemical excitability in these animals: (i) an acrial distance excitability on all parts of the body with predominance of the mouth, the anterior edge of the foot, and the siphon; (ii) a contact sensibility in both air and water in the horns in the mouth; and (iii) a delicate distance sensibility in water located in the regions of the mouth, the horns, the anterior edge of the foot and the osphradial region.33

Three-sensed organisms possess a sense of touch, taste and Many examples have been quoted. The ants have three senses. The four-sensed organisms possess the sense of touch, smell, taste and sight. The bhramara (the bee) has four senses. Many of these belong to the species of insects. But comparative psychologists are not agreed on the place of the sense of sight in insects. homing of the bees and their recognition of their nest-mates were the two interesting problems which psychologists were faced with. Some scientists thought that vision is the guiding factor in these cases. However, Bethe thought that they were not guided by sight. He said there was some unknown force which guided them to their hives. scientists believe that smell plays an important part in this case. Modern scientists have observed that even simple animals like the amoeba give reaction to light stimulation. Schaeffer reports a curious fact that the

³² Washburn (M.): The Animal Mind, IV Ed Ch. V. p 67 33 Ibid. p 71

amoeba can 'sense' a beam of light 20 microns to 120 microns distant moving towards it. Many jellyfish react to light. Romanes says that they possess a visual sense; but there is no positive evidence. Some of the molluscan species possess eyes of some degree of development, although their reaction to light is very slow. The crustacea are provided with a peculiar visual organ, the compound eye; and the chief fuction of this eye seems to be that of responding to shadows and movements. As we go higher up in the animal scale, we find that the structure of the eye becomes more complex, and the compound eye gives rise to the simple eye with cones and rods The vertebrates, like fish (matsya), crocodile (makara), and man are five-sensed organisms. Those possessing the five senses are divided into two groups: (i) those possessing mind and intelligence; these are called samifinah; (ii) those who do not possess mind and intelligence, asamiñinah. It is not possible to say whether the Jamas showed a qualitative distinction between sense and reason. However, they maintained that among the five sensed animals only some of them are samphins. Human beings belong to this class. They possess specific mental states like memory, imagination and intellection.34 The asanifhins do not possess such mental qualities. A further psychological analysis of this group is made by the Jainas. They say that the samifins are further divided into those which are incomplete and those which are Incomplete species are those in which the sense capacities do not work freely and are deficient in expression. Such deficiency may be due to a defect of structure in the sense organ or in the mental capacity to grasp the sense experience. This, in brief, is the classification of animals having sense organs. Going higher in the scale of life, there are those beings who are not fettered with the sense organs, They are called anindrivas. They get pure and unalloyed experience, because sense experience, according to the Jainas, is experience at a lower It is not direct experience of the soul. It comes through the sense organs, which are a limitation. Beings without sense organs come nearer to the realization of the highest experience. Some of them are complete in mental equipment and capacity. They are perfect beings. They are siddhas. Thus, from the psychological analysis of the development of animal life we go to the metaphysical nature of the soul found in the disembodied being. The embodiment of the soul is a hindrance to the attainment of pure experience. Pure experience is possible by removing the barrier of the senses. The present stage of psychology cannot explain such a phenomenon as super-sensible experience, although it is possible to approach this problem through studies in para-psychology

³⁴ Abhidhanraajendra, Vol. 11. p. 568.

Samjūrno samjūrnašca tatra samjūānam samjūā cetanavadbiāvināvašyambhāvaparyālocanam sā vidyate samjūrnah visiotasmaranādirūpa manovijūānabhājaityarthah.

and extra-sensory experience. Research in this direction is both possible and necessary. This problem will be referred to in a later chapter in which extra-sensory perception will be discussed.

Sense qualities

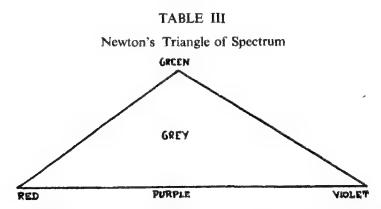
Sense organs are instruments by means of which sense experience is possible. The senses are capacities of experience, and the sensible qualities which exist outside are objects of experience. For instance, the common element between the eye and the object is colour, and the common element in the case of hearing is sound. They are stimulations. The Jainas have given a psychological analysis of the sense qualities emerging from the experience of the various senses. As Radhakrıshnan says, a good deal of psychological analysis is discernible in the division of sense qualities. 95 According to the Jainas, the visual sense quality of colour is classed into five types: black (krsna), blue (nîla), yellow (pīta), white (sukla), and pink (padma).86 Young supposed that there exist three distinct sets of nerve fibers, one set sensitive to red, one to green and the third to violet. This theory has been expounded by Helmholtz. There are three primary colour excitations, and the mixture of these three gives different colour experiences. All fibres are responsive, in some way, to all waves, though the red fibres are excited by the long waves Green fibres respond to those of medium Violet fibres are maximally stimulated by short waves. colour experience results from these three simultaneous excitations based on the relative strength of the components in the stimulus of light. This is the Trichromatic theory. But Hering and Franklin have objected to this theory. They maintain that yellow and white are as primary as the three colour qualities mentioned by Helmholtz. Hering supposed that the primaries are to be arranged in pairs. There are three complex substances, one mediating white-black, another red-green, and the third responsible for yellow-blue. The white-black material is more plentifully supplied and is more readily excited than others. When activated, it gives purely achromatic brilliance and can be depressed in direction by black only through light adaptation and contrast. The other two substances behave differently, having their activity either depressed or augmented. The red-green substance yields red when 'torn down' by light, and green when built up. In the yellow-blue substance, depression produces blue, whereas augmentation results in yellow. Franklin theory represents, in a sense, a compromise between the trichromatic combination for mixture and the tetra-chromatic combination in its existence. It points out that there are five primary colour qualities, 37

³⁵ Radhakrishnan (S): Indian Philosophy, Vol. I, p. 309.

³⁶ Tattvärthådhigamasütra, Ch. II, Sütra 20.

³⁷ Spearman: Psychology Down the Ages, Vol. 1, pp. 199-200.

In fact, Newton presented his celebrated triangle for explaining the natural phenomenon of the spectrum and the scope of the sense of sight. The triangle places green at the apex, red and violet at the lower points, gray in the centre, and purple at the mid-base. The figure is given in Table III. Instead of this triangle, Wundt proposed a circle. Titchner gives us a pyramid in which every possible chromatic or achromatic variation finds its due place.³⁸ Whatever may be the difference between the views of the Jainas and of modern scientists, it may be said to the credit of the Jainas that they were aware that the five sense qualities are responsible for giving the variation in colour experience. Modern scientists like Ladd and Franklin, and even Newton, have mentioned five primary qualities. According to the Ladd-Franklin theory, thare is a white-black whole and a yellow-blue whole; similarly, it mentions the red-green whole. The Jainas did not mention red-green as a specific sense quality.



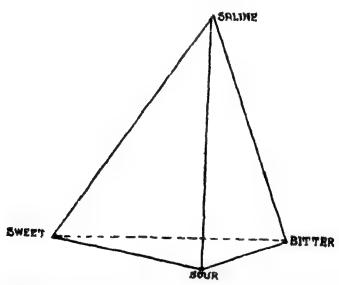
Regarding sense qualities like touch, taste and smell, the Jainas give a detailed analysis of the different types of sense qualities. Touch is of eight kinds, like hot (uṣṇa) and cold (śīta); rough (rukṣa) and smooth (snigdha); soft (komala) and hard (kaṭhora); light (laghu) and heavy (guru). Modern scientists have realized that skin has the potentiality of yielding a greater diversity of sensations, because the skin proves to be responsive to a wide range of stimuli, like mechanical, thermal, electrical and chemical. Mechanical stimulation gives rise to sensation of touch, contact and pressure. Thermal stimulation produces the sense experience of warm and cold in various degrees. Chemical stimuli have been worked to give rise to pain. Chemicals and drugs have been of much interest for their quality of reducing pain. Electrical stimulation of the skin

³⁸ Spearman: Psychology Down the Ages, Vol. I. p. 199-200.

³⁹ Tattvärthädhsgamasütra, Ch. II, Sütra 20, with commentary,

seems capable of arousing all systems of sensibility. Kinaesthetic and organic sensibilities of various types including hunger and organic pain belong to the sense of touch. The Jainas say that there are five types of taste: pungent (tikta), bitter (kaiu), acid $(\bar{u}mla)$, sweet (madhura) and astringent $(kas\bar{a}ya)$. Some scientists have accepted salt, sweet, bitter and sour as the primary taste qualities. However, there is no complete agreement on this point. In the Western thought, at the end of the sixteenth century, there were nine basic taste qualities, like sweet, sour, sharp, pungent, harsh, fatty, bitter, insipid and salty. By the middle of

TABLE IV
Henning's Taste-tetrahedron



the eighteenth century, some of them were gradually dropped, because it was found that they were merely mixtures of different taste qualities. Later, four qualities were accepted as primary Henning's 'tastetetrahedron' presents the relation between the four primary taste qualities: saline, sweet, sour and bitter. Various other taste qualities arise out of the inter-action of the primary qualities.⁴¹ However, Henning views taste as one, and not four senses. Henning's tetrahedron is shown in Table IV.

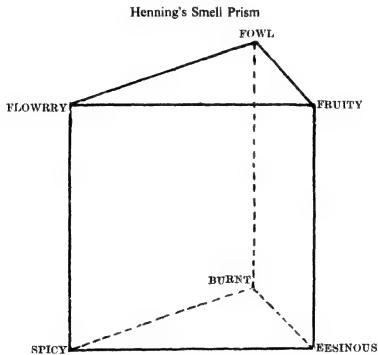
The Jainas classified smell in only two types, as good, (sugandha) and bad (durgandha). No further distinction has been made.

⁴⁰ Goldard (FA): The Human Senses, p 313.

In the eighteenth century, in Europe, an odour system was devised. Henning has given a scheme of odour prism which is shown in Table V.

The Crocker Henderson system posits four fundamental odours, like fragrant, acid, burnt, and caprylic. All these classifications are partly based on experimental investigation and partly on rational insight. But there are difficulties in the grouping of odours, because, as Woodworth points out, in the analysis of Henning's classification some odour qualities are not purely odour. They are mixed up with taste qualities. Zwaardemaker classified the smell qualities as ethereal (as in

TABLE V



fruit), aromatic (as in spice), fragrant (as in flowers), ambrosial (as in musk), alliaceous (as in onion), ampyreumatic (as in tar), hircine (as in cheese), repulsive (as in laudanum), and nauseous (as in decaying flesh).42 This is a very elaborate, even clumsy, classification. It does not mention the primary sense qualities alone. The Jainas gave an analysis of the odour qualities, and in fact of all sense qualities, on the basis of rational insight. They thought it safer to analyse the smell sense qualities into two major categories, as good and bad.

⁴² Geldard (F.A.): The Human Senses, p. 315,

The traditional exposition of the seven fundamental sounds (svara) mixing in various ways to form melodies of various types, has been accepted by the Jainas. The seven sounds are: sadja, rṣabha, gāndhāra, madhyama, pañcama, dhaivata, and niṣādha. In the Western sound system, we get the following: Do, re, me, fa, sol, la, and si. In all, there are twenty-seven main kinds which can be combined in innumerable

TABLE VI

- 1 Sparsa—Touch—8 kinds:
- (1) Uṣṇa (hot), (2) Śīta (cold); (3) Rukṣa (rough); (4) Snigdha (smooth); (5) Komala (soft); (6) Kaṭhora (hard); (7) Laghu (light); (8) Guru (heavy).
- 2. Rasa Taste-5 kinds:
- (1) Tikta (pungent); (2) Amla (acid);
- (3) Katu (bitter), (4) Madhura (sweet);
- (5) Kaṣāya (astringent).
- 3. Varņa Colour 5 kinds.
- (1) Kṛṣṇa (black); (2) Nīla (blue); (3) Pīta (yellow), (4) Śukla (white); (5) Padma (pɪnk).
- 4. Gandha Smell -- 2 kinds
- (1) Sugandha (sweet smelling), (2) Durgandha (bad-smelling),
- 5. Sabda Sound -- 7 kinds
- (1) Şadja; (2) Rşabha; (3) Gāndhāra; (4) Madhvama, (5) Pañcama; (6) Dhawata, (7) Nıṣādha; i.e. the: Do, re, me, fa, sol, la, si

These are 27 which can be combined in various ways.

Note. In rational beings, mind also assists the senses in bringing knowledge to the soul.

ways. There are two varieties of combination of tones: difference tones and summation tones. The difference tones were discovered by the celebrated Italian violinist, Tartini. Summation tones were discovered after the Helmholtz researches, in 1856 A.D. A difference tone has a pitch determined by the difference between the frequencies of the two other tones. The pitch of the summation tones results from the addition of frequencies. The study of the combination of tones and beats has

led to research in auditory harmony. In the case of sound researches, Spearman says that a distinction has been drawn between noise and tone. A detailed classification of the Jaina view of sense qualities is shown in Table VI.

Thus, the analysis of sense qualities given by the ancient Jainas has not been arbitrary. It has a great psychological significance. although it has no basis in scientific and experimental research. However, it can be said with confidence that the Jaina analysis of sense qualities shows a good deal of psychological significance, and has shown very deep and clear rational insight. The conclusions drawn by these philosophers may not be adequate and not agree with the modern views of scientists who have worked out the same problems through experimental research in laboratories. It may be noted that there is not either much agreement among modern scientists as to the detailed analysis of sense qualities like colour, sound, smell and taste, although there is a fair agreement on the fundamentals. The same measure of agreement can be found in the views of the Jaina philosophers. In fact, the views presented by the Jaina philosophers on the problem of sense qualities very much agree with the views of other Indian philosophers of ancient times. We find this in a description of sense qualities given by the It is needless to say that the psychological significance Naivāvikas. of the analysis of sense qualities given by the Jainas purely through rational insight and not on the basis of experimental research, cannot be ignored.

⁴³ Spearman (C): Psychology Down the Ages, Vol. I, p. 200.

CHAPTER V

THE JAINA THEORY OF SENSE PERCEPTION

The Jainas have made a significant contribution to the theory of sense perception. In order to understand the Jaina theory of sense perception it is necessary to study their epistemology.

The Jaina attitude is empirical and realistic. The Upanisadic philosophers found the *immutable reality* behind the world of experience. Goutama, the Buddha, denounced everything as fleeting and full of sorrow. Mahāvīra stood on commonsense and experience and found no contradiction between permanence and change. The Jaina philosophy is based on logic and experience. *Moksa* is the ultimate aim of life. It is realized by the three-fold path of right intuition, right knowledge and right conduct. Right knowledge is one of the major problems of Jaina philosophy. It is necessary to understand the Jaina theory of knowledge and experience for the proper understanding of Jaina thought. The Jaina epistemology is very complex and developed gradually in response to the demands of time.

The Āgama theory of knowledge is very old and probably originated in the pre-Mahāvīra period.² Jāāna pravāda formed a part of the Pūrvaśruta which formed a part of the ancient literature. Jinabhadra, in his Viśeṣāvaśyakabhāṣya, quotes a pūrva gāthā on jāāna.³ There seems to have been no difference of opinion between the followers of Pārśva and Mahāvīra regarding the division of knowledge. Both of them accept the five-fold distinction of knowledge. The Āgamas have also presented the five divisions of knowledge.

Knowledge is inherent in the soul, but owing to perversity of attitude arising out of the veil of karma, we may get wrong knowledge, ajñāna. Knowledge is perferct when the veil of karma is totally removed. It is imperfect even when there is partial subsidence or destruction of karma. The soul can get perfect knowledge directly when the veil of karma is removed. That is pratyakṣa jñāna. But empirical knowledge, experience of this world, is possible with the help of the sense organs indirectly. Such knowledge was called parokṣa jñāna. Matijñāna (sense experience), and śrutajñāna (knowledge due to verbal communication), are parokṣa jñāna; while avadhi (extra-sensory perception), manahparyāya (telepathy), and kevala jñāna (omniscience), were called pratyakṣa.* But

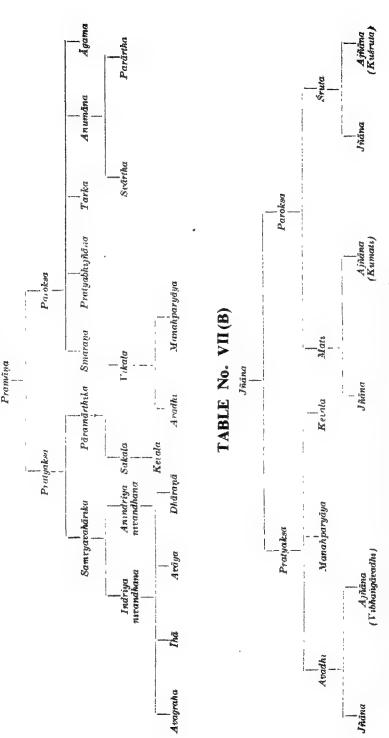
¹ Tuttvärthädhigamasütra, 1.

² Tatia (N.): Studies in Jaina Philosophy, p. 27

³ Viérnávasyakabhäsya, 121.

⁴ Sthānāṅgasūtra, 11, 1, 7,

TABLE No. VII(A)



Note: This is based on the analysis given by S. C. Ghoshal in his edition of Dravyasamgraha.

later, in order to bring the Jaina theory of knowledge in line with the theories of other systems of Indian thought, they modified their conception of pratyaksa and parokṣa jñāna. In the Anuyogadvāra Sūtra, we find a change in terminology. Mati and śruta began to be called pratyaksa as they were possible through the operation of the sense organs. Jinabhadra calls the two samvyavahāra pratyaksa.5 Alongside of jñāna, we have direct intuition of the object. It is darśana. Darśana has similar subdivisions. In the same way, wrong knowledge is also possible in those cases where the veil of karma is not removed and where there is perversity of attitude. Thus, we have mati-ajñāna, śruta-ajĥāna. and avadhi-aiñāna. The general classification of knowledge and intuition mentioning their perversities, is shown in Table VII. This classification shows that the Jainas believed that the subsidence and destruction of the veil of karma is a necessary condition of knowledge and intuition. Wrong knowledge is characterized as samsaya (doubt), viparyāya (perversity), and anadhyavasāva (wrong knowledge caused by carelessness and indifference). Owing to the lack of discrimination between thereal and the unreal, the soul with wrong knowledge, like the lunatic, knows things according to its own whims. Perversity of attitude veils the faculty of perception and knowledge, and knowledge becomes vitiated. It becomes ajñāna.6

Pratyaksa

We may now consider sense perception or pratyaksa jñāna, as the Nandisūtra calls it. It is knowledge obtained through the operation of the sense organs and the manas. It was called paroksa by Umāsvāti. Jinabdhara called it sainvyavahāra pratvaksa. It is also called indriya pratyaksa. In the Nandisūtra, a distinction is made within pratyaksa, between perception (indriva pratyaksa), and perception not due to the sense organs (unindriya pratyaksa).8 Hemacandra describes in the Pramāṇamīmāmsā that pratyakṣa is that which is immediate, clear and unambiguous. He analyses the various definitions of pratyaksa of other schools and shows that they are not adequate. The Naiyāyıka definition of perception as unerring cognition which is produced by the sense object contact is not adequate. How can the sense object contact and the like, he asks, which is not of the nature of cognition, function as efficient instrument for the determination of the object? The Buddhists have given a definition of perceptual cognition as that which is free from conceptual construction and is not erroneous.

⁵ Tattrārthasūtra, I 9-12. Anuyogadvāra Sūtra, p. 194 Nandisūtra, 4.

⁶ lbid. 32. Pañcāstīkāyasāra, 47.

⁷ Videyāvahyakabhāsya 95. Nandisūtra

⁸ Nandistira For this discussion also refer to Tattertha Sutra I, II and its Bhasya.

But Hemacandra says that this definition is irrational since it has no bearing on practical activity. It has no pragmatic value. Jaimini defines perception as that which is engendered in the mind of a person upon the actual contact of the sense organ with the object. This definition is also too wide, since it overlaps such cognition, as doubt and illusions also occur as a result of sense contact. The older exponents of the Sārikhya school define perceptual cognition to be modification of the sense organs such as the organ of hearing. But sense organs are devoid of conciousness; therefore, their modifications cannot be conscious. If, on the other hand, it is assumed to derive its conscient character from its association with a conscious principle like the self, then the status of the organ of knowledge should be accorded to the self. Therefore, Hemacandra said, perceptual cognition is immediate and lucid.⁹

It is not possible that sense perception, which is based upon the stimulation present to the senses, is incapable of knowing the cognitions that preceded and that follow. Even in the case of cognitions arising out of the data present to the senses, the cognitions would be only subjective. It would not be possible to determine their validity or invalidity to the satisfaction of an outsider. It would be difficult to establish objective validity; hence sense perception is one of the sources of knowledge, and not the only source as the Cārvākas would maintain.

In Plato's dialogue, Theaetetus, Socrates examines the doctrine that knowledge is through perception. This is the position of the common notion that knowledge of the external world comes to us through the senses. Socrates points out that the view of Theaetetus is identical with the doctrine of Heracleitus that all things are in motion, and the Protagorean dictum, homo mensura. Socrates in the end shows that the position adopted by Theaetetus is not acceptable because it leads to an impossibility. Socrates said that, if knowledge and perception are the same, it leads to an impossibility, because a man who has come to know a thing and still remembers it does not know it, since he does not see it, and that would be a monstrous conclusion. 10

Pratyakṣa is defined in the Pramāṇamīmāmsā as that which is immediate and lucid. These characteristics are applicable to both perceptual and non-perceptual experience, experience through operation of the sense organs and experience without the help of sense organs. We have seen that in the Nandisūtra a distinction is made between pratyakṣa as that which is due to the sense organs, and that which does not need the mediation of the sense organs. They are called indriya pratyakṣa and unindriya pratyakṣa, respectively. Indriya pratyakṣa is cognition which is immediate and direct and arises out of the operation of the five sense organs. There are, therefore, five types

⁹ Pramūņamīmāmsā, I. 1. 20. and its commentary.

¹⁰ Theaetetue, 164. B.

of sense perception—the visual, auditory, tactual, olfactory and gustatory. The experience that does not need the sense organs and is immediate may be called extra-sensory perception. It is also pratyaksa, because it is immediate and direct. This was called real (pratyaksa), by the followers of Agama literature. It is of three types, avadhi, manahparyāya and kevala pratyaksa. In this chapter, discussion will be restricted to the sense experience, indriva pratyaksa. It is also called, as was seen earlier, samvyavahāra pratyakṣa. Emperical knowledge may be called samvyavahāra pratyaksha. It is of two kinds, mati and śruta. Matiiñāna is a species of Samvyavahāra pratyaksa. Matijiiāna is defined as knowledge due to the sense organs and mind. Indriya pratyuksa may, therefore, be regarded as a form of matijñāna. This may be called sense perception Sense perception may be regarded as matiiñana, as it is concerned with the contact of the sense organs with the object. Sense perception of this type may be compared with the definition of pratyaksa given by Gautama, the founder of Nyaya philosophy, already referred to. Gautama defines pratyaksa as knowledge which arises out of the contact of sense organs with its object, inexpressible in words, unerring and well-defined.¹¹ Gangesa says that this does not include intuitive perception, which is also direct and without mediation of the senses.¹² The Jainas called the type of perception defined by Gautama a form of matijiāna. In the Jaina Agamas, matijñāna is also known as ābhinibodhika-jñāna. 18 But the term matijñāna seems to be older than übhunibodhika-jñāna, as matijfiāna is associated with the karma theory which is very old.14 The old Jaina thinkers thought that knowledge born with the help of the five senses as well as the manas may be called matijnana. But in indriva pratyaksa they included knowledge born of the five sense organs, as the mind is not for them exactly a sense organ. It is a quasi-sense organ.

In Jaina literature various synonyms for matijñāna have been mentioned. Tattvārthasūtra mentions mati, smṛti (recollection), cintā (thought), and ābhinibodha (perceptual cognition), as synonyms. Bhadrabāhu mentions īhā associative integration, apoha, vimarša, mārgaṇā, gaveṣanā, sanijñā and smṛti as synonyms. 16 Nandisūtra follows Badrabāhu. The mention of all these synonyms does not mean that they identified the various forms of cognition mentioned in the synonyms as sense perception, because Bhadrabāhu and Umāsvāti, for instance, would not in the least have meant that smṛti is identical

¹¹ Nyāyasūtra, 1. 1. 4

¹² Tattvacintāmņi, p. 552.

¹³ Dasavarkálska Niryukti, (láthá 49-50.

¹⁴ Tatin (N). Studies in Jama Philosophy, p. 27

In Tattearthasütra, I, 13.

¹⁶ Videpävadyakabhänya, 396

with sense perception; nor cintā identical with matifhāna. However. what they meant was that, in empirical experience, we find matijhana and such experience as recollection and thought. In this sense, matijhana may be said to include sense experience due to the operation of the five senses and experience through the manas, as the Jaina philosophers following the Agamic literature maintained. In the Pramanamimamsa. empirical perception is described as perception due to the senses and mind. In the commentary of the same stanza it is said that the phrase 'due to the sense and mind', (indriya manonimittam), has both collective and distributive meaning.¹⁷ But matijhāna, in the sense of experience due to the five sense organs, is a form of pratyaksa. It is indriva pratyaksa. Umāsvāti also includes experience due to the mind in matijāāna. He defines matijñana as knowledge caused by the senses and mind, since mind is a quasi-sense, no-indriva.18 The commentator Siddhasenaganin mentions three types of mati. (i) knowledge born of the sense organs, (ii) knowledge born of the mind, and (iii) knowledge due to the joint activity of the sense organs and mind.19 However, from the Bhasya of the Tattvārthasūtra we find that matijñāna can be distinguished into four types, as (i) knowledge due to sense organs, like sense perception; (ii) knowledge due to the mind only, like cintā; (iii) knowledge due to the joint activity of the mind and the senses. Memory and recognition can be included in matiiñānu. Akalanka says that memory, recognition and discursive thought are cases of matijhana so long as they are not associated with language. As soon as they are associated with words they become śruta-iñāna, although very few philosophers have supported However, if matijñāna were to include Akalanka in this respect.²⁰ cognition due to the joint activity of the sense organs and the mind, memory and recognition may well be included in matijhana. In the fourth stage of matijñāna, cognitions without the help of the sense organs and the mind are included. For instance, the vague and primitive awareness of the plant life and the instinctive awareness of the lower organisms which have not yet developed sense organs, may be said to be cognition of this type. These are direct forms of awareness. Sense perception (indriva-pratyaksa), as a species of matijhānu is of five types based on the nature and function of the five sense organs.21 The five senses possess the capacity of sense experience because the cognition of the stimulation must be conditioned by the relevant instruments. The sense is the mark which denotes that cognition of the object has been generated by the self. We get a similar description

¹⁷ Pramāņamīmāmsā, 20 and commentary

¹⁸ Tattvārthasūtra, 1. 14.

¹⁹ Tattvārtha Tīkā, 1. 14.

²⁰ Laghiyastraya. 10. 11.

²¹ Pramāņamīmāmsā, 21 and commentary.

of sense perception in the Nyāya Sūtra. The five types of sense perception are based on the special characteristics of knowledge. (buddhi laksana), visual, auditory, olfactory, gustatory and tactual. The senses consist of elements endowed with a special quality, and so they are able to perceive the respective objects and not themselves. For instance, the eye sees the external object and not itself.22 In sense perception, it was seen in the last chapter, the sense of touch is fundamental. Similarly, the sense of sight is vital for human life. Price says that the experiences of seeing and touching are primary, other modes of sense experiences; like hearing and smelling, are only auxiliary. 'If we possessed them but did not possess either sight or touch we should have no belief about the material world at all, and should lack even the very conception of it'.28 It was also seen in the last chapter that, according to the Jainas, the sense of sight is of a fundamentally different nature, in that the other sense organs are based on the contact of the sense organs with the object, while the sense of sight does not need any contact with the object.

The nature of sense perception will now be analysed. The task here is to give a psychological analysis of the experience, if possible. It may aptly be said that the Jaina analysis of sense perception has a great psychological significance, although perception was a logical and metaphysical problem for the Jainas as for other Indian philosophers. In fact, even in the West, philosophers were first busy with the logical and the metaphysical analysis of the problem of perception, but with the advancement of psychology as a sceience, philosophers have realized that perception is more a problem for psychology. Bertrand Russell says that, 'the problem of perception has troubled philosophers from a very early date. My own belief is that the problem is scientific, not philosophical, or, rather, no longer philosophical'.24

Conditions of Perception

Sense organs are a condition of sense perception. *Indrivas* are the instruments by which we get sensory experience. The senses are the marks of the self, and they afford proof of the existence of the self. The senses are instruments like the carpenter's axe, by which experience is obtained by the self.²⁵ The contact of the sense organs with the object is a condition of perception as mentioned by the Naiyāyikas,²⁶ although, according to the Jainas, such a contact is not necessary in the

²² Nyāya Sūtra, III. 1 68-69

²³ Price (H. H.) Percephon, Ch. I. p. 4.

²⁴ What is mind? Article by B. Russell in the Journal of Philosophy, Vol. LV. No. 1, p. 9. Jan. 2, 1958.

²⁶ Pramāņamīmāmsā, 21 and commontary.

²⁶ Nyaya Sitra, III. I. 68-69 Indriyartha-sannikargam.

case of visual experience. According to the Nyāya definition, perception involves defferent factors, viz., (i) sense organs, (ii) their objects, (iii) the contact of the sense organs with the object, and (iv) the cognition produced by them. It is sometimes maintained that the description given by the Jainas of sense experience as cognition due to the senses and the mind is inadequate. Visual perception, for instance, has the additional condition of the presence of light. But it has been pointed out by Hemacandra that objects and light are not conditions of experience, because of lack of concomitance between the two.27 But it is not denied that they are remote conditions, like time and space, which subserve the subsidence and destruction of the knowledge-obscuring karmas. They are indirectly useful to the visual organs, like collyrium. The inadequacy of the view that the object and light are conditions of perception can be seen from the fact that illusive perception of water takes place in a mirage. Cats and owls perceive in the dark, where the stimulation of light is absent.38 This is meant to show that the Nyāya emphasis on the object as a condition of perception is not acceptable. Perception of a particular object is, in fact, according to the Jainas, due to the destruction and subsidence of the relevant knowledge-obscuring karmas, jñānāvaranīya This implies a psychological factor. An appropriate psychical condition in the destruction and subsidence of knowledge-obscuring karma is a necessary factor in the perceptual experience. depends on the competency of the appropriate psychical factor. instance, even when the object is present we may not see it when our attention is elsewhere engaged. In the Samayasara we read that the presence of stimuli in the external environment and even their coming into contact with the sense organs may not be effective to produce the relevant experience. For instance, we may not see an unpleasant visual form, even though the stimulation may reach the eyes. factor of selective attention is needed before we get the sense experience. This is possible when all psychic impediments are partially or wholly removed through the destruction and subsidence of knowledge-obscuring karma.29 We have described such a psychic factor as a mental set which is necessary for the perceptual experience. Emphasis on the mental factor in perception has been mentioned in the Upanisads also. This was referred to in the earlier chapter. We here have the dictum that when the mind is elsewhere we do not see. 'I was absent in mind, I did In Western thought, Aristotle was clearly aware that perception is not possible merely through the sense organs. For him, perception consists in being moved and affected. Sense perception does

²⁷ Pramāņamīmāmsā, 1, 25 Nārthālokau jňānasya nunsttam avyaterekāt.

²⁸ Ibid and commentary.

²⁹ Samayasdra, 376-382.

³⁰ Brhadaranyaka Upanisad, III, I, 4.

not arise from the senses themselves, as organs of sense perception are potentiality and not actuality.⁸¹ Locke writes that, whatever alterations are made in the body, if they reach not the mind; whatever impressions are made in the outward part, if they are not taken notice of within, there is no perception. For we may burn our body with no other effect than it does a billet unless the motion be continued to the brain; and there the sense of hurt or idea of pain be produced in the mind, wherein consists actual perception.³² In modern psychology, Prof. Woodworth gives a formula 'W-S-O-R-W' for explaining the fascinating problem of how an individual perceives an objective fact. At any given moment a man is set for the present situation. He might be listening to a low hum just as a smooth tone. But if he tries to make out what the sound can be, he is more likely to perceive it as the hum of an aeroplane.³⁸

Thus we find that the analysis of perceptual experience shows that the sense organs and the contact of the sense organs with the stimulations of objects are no doubt conditions of perception. But that alone is not sufficient. A psychological condition is necessary for the experience. This psychological factor consists, negatively, in the removal of the psychic impediments to perception. This may be likened to the subsidence and destruction of the knowledge-obscuring karmas of the Jainas. On the positive side, the psychic condition is selective attention and the 'mental set'.

Stages of Sense Perception

³¹ Aristotle's Psychology.

³² Locke (John) An Essuy concerning Human Understanding, Ch. IX. Perception,

³³ Woodworth (R. S.) Psychology A Study of Mental Life, p. 403.

³⁴ Tattvārthasūtra, 15.

³⁵ Nandisūtra: 26.

partake of the same essential nature.³⁶ Thus, in the Jaina thought, four stages of matijñāna, as mentioned above, have been described.³⁷ Avagraha refers to the first simple and primitive stage of experience. This may be said to be merely the stage of sensation. Next comes $ih\bar{a}$. In this stage there is a mental element, and it refers to the integrative factors of the mind. In the third stage, we get a clear and decisive cognition of the object. This is $av\bar{a}ya$. It implies the presence of the inferential element in perception. $Dh\bar{a}ran\bar{a}$ is retention of what is already experienced in the perceptual cognition. In fact, it is not actually a stage of perceptual experience although it is included in perceptual experience.

Psychologists point out that perception is not a simple process nor is it merely the sense-datum. It consists in the organization and interpretation of sensations. It is 'knowledge about' and not merely 'knowledge of acquaintance', as William James said. Perception involves certain psychological factors like association, discrimination, integration, assimilation and recognition. Perception also involves inference. We perceive a table, and when we perceive the object as a table we recognize it and we get a defined picture of the object. said, perception is a synthetic process, and the combination of the new and the old is an essential part of the synthesis. This process of combining was often called, by early psychologists, 'apperception'. This problem will be referred to later. Structural psychologists like Wundt and Titchner analysed perception into sensations. They said that perceptions combine and fuse together a number of sensory elements as in the process of forming H₀O. It is not merely a sum of sensations. It gives a new psychological product, a creative synthesis, like the mental chemistry of J. S. Mill. Later, the Gestalt psychologists gave a new turn to the psychology of perception. They hold that every perceptual experience is an unanalysed whole; it has a quality of its own. Thus, we find that perceptual experience is not a simple unit although it is a whole and unanalysed experience. In the Pramānamīmāmsā there is a statement that different stages of perceptual experience are essentially of the same nature. The Jaina philosophers were concerned with giving a logical and epistemological analysis of the perceptual experience. Therefore, they were more interested in giving the conditions and the stages of knowledge. However, their discussion of the problem has given a psychological picture of perception in terms of logical analysis. It is difficult to find the acumen of present-day psychological analysis in the writings Moreover, we may remember that their of the ancient philosophers. knowledge and equipment of psychology were very meagre. They had no experimental basis. Their analysis was more on the basis of logic,

³⁶ Pramāumīmāmsā, I. 1, 20 and commentary.

³⁷ Dravyasamgraha, Edited by Ghosal, p. 12.

of common sense and on insight; and yet, the stages of perception mentioned by the Jaina philosophers very much correspond to the analysis of perception given by the traditional psychology and the structuralist school.

Avagraha -- Sensation

Avagraha is the first stage of sense experience. It may be said to be analogous to sensation. It is the level of sensation in which Umāsvāti defines avagraha perceptual experience can be analysed. as implicit awareness of the object of sense. He says that grahana (grasping), alocana (holding), and avadharana (prehending), are synonyms of avagraha.34 It is indeterminate. The object presented through sense stimulation is cognized in an undefined and indeterminate way. In this stage, we are merely aware of the presence of the object without any asssociation, without cognizing the specific features, and in fact without even being aware of its association and name. 89 In the Avasyaka-Niryukti, avagraha has been defined as awareness of the sense data.40 Jinabhadra insists that avagraha is indeterminate in its character. He is not prepared to consider that it has reference to any specific features of the object, because even relative reference is enough to promote the experience to the stage of avaya. Then avaya becomes a higher stage, and the stage of avaya will not be necessary or possible once the cognition of specific features is admitted in the case of avagraha. It would lead to an endless series, because cognition of the particular is relative to the state of knowledge, and it would increase as knowledge increases. It is not possible to ascertain all the particulars of an object even in a long time. It is, therefore, more appropriate to say that avagraha is mere awareness, mere cognition of an object without the knowledge of the specific nature of the object nor of its name.41 Nandisūtra does not define avagraha. It gives the implications of the definition of avagraha as given in the Avasyaka-Niryukti and describes it as cognition of sense-data. It gives illustrations. It also gives avagrahaņatā, upadhāraņatā, śravaņatā, avalambaṇatā and medhā as its synonyms.42 But some Jaina logicians, like Pūjyapāda Dēvanandi, Akalanka, Vidyānandi and Hēmacandra, have said that avagraha is determinate cognition. Pūjyapada Devanandi says that, when the sense organ comes in contact with an object, there is intuitive apprehension (daršana). After that, we get cognition of the object, which is of specific nature. This is avagraha.48 For instance, we cognize white colour with our eyes: 'it is white'. In this sense, the intuitive apprehension

³⁸ Tattvårthasütra Bhäsya, 1. 15.

³⁹ Ibid.

⁴⁰ Avoéyaka-Niryukti, 3.

⁴¹ Visesāvasyakabhāsya, 25, 5, 6.

⁴² Nandi Sūtra, 30

⁴³ Sarvärthanddhi, I. 15.

(darsana), becomes the first stage of sense experience. It will be indeterminate. It will be a species of iñāna. It has already been mentioned in this connection that darsana cannot be identified with the primitive and early stages of sense experience. In that case, we could not have the highest stage of darsana, like kevala darsana. Akalanka defines avagraha as a determinate cognition of the distinctive nature of the object. It comes after the intuitive apprehension which is due to the contact of the sense organs with the object.44 With the contact of the sense organs with the object, there arises 'intuition of the bare existence' of the object, sanmätra darsanam. This intuitive apprehension develops into the determinate cognition of the object. That is avagraha. According to Hemacandra avagraha is a determinate perception which follows the indeterminate intuition through the contact of the sense organs with the object. Indeterminate intuitive experience is darsana. It does not grasp the specific characteristics of the object. This darsana transforms itself into a determinate cognition, which is avagraha. But this avagraha is not a mental construction, 46 because it depends on the active exercise of the sense organs like the visual, and also because it cannot be corrected by discursive thought. Therefore, it is still immediate and direct experience based on the contact of the sense organs with the object. Vidyānandi and Vädi-devasūri make avagraha determinate cognition.

However, it would be difficult to make avagraha determinate cognition as coming after darśana, which is indeterminate and due to the contact of the sense organs and the object, as these logicians have described. In that case, as we have said earlier, darśana will become a mere species of jñāna and will be reduced to the level of mere sensation. The higher forms of darśana, like kevala darśana, would be meaningless because there would be no higher form of darśana. All darśana will be reduced to the sensational level. But we find that the higher forms of darśana have been accepted. It would, therefore, be more appropriate to treat darśana as a separate type of experience, in the sense of intuitive experience, and avagraha as the first stage of jñāna. It is really the sensational stage, where there is mere awareness of the existence, without the cognition of the specific features, of the object.

Sensations, as William James said, are the first things in consciousness. This does not mean that all our experience is only fusing and compounding of sensations. Our experience can be analysed into sensations, and these form the elements of our sensory experience. As Stout says, sensations are of the nature of immediate experience, like the experience of cold and warm, a specific tinge of pain, or a

⁴⁴ Laghiyastraya, 5.

⁴⁵ Prmāņamimāmsā, I. 1, 26.

⁴⁶ Ibid. Na cāyam mānaso vikalpaķ.

touch located in the body or at the surface of the body. The term sensation is also extended to cover the visual data, sound, taste, and smell which may enter into immediate experience. Sensations vary not only with the variations in the presented objects but also in accordance with the state of the bodily organs. They are private and immediate experiences of the individual.47 Sensations are aboriginal and without precedent; a mental first cause, uncaused by antecedent mental events and inexplicable in strictly psychological terms. They are a first beginning of the knowledge, and the ultimate source upon which all empirical cognition rests.48 Further, sensations are simply given rather than made. are 'impressions' which the mind passively receives. They constitute, as Lewis says, a content of experience "which we do not invent and cannot have as we will, but merely find".49 During the period of two hundred years between the publication of Locke's Essay and of James's Principles, two further characteristics, now largely of antiquarian interest, were gradually attributed to sensation. Sensations were held to be the simple elements of which complex ideas are formed, as well as the matter or crude stuff out of which the associative machinery fashions the organized and meaningful world of everyday experience.50

In this sense we can say that avagraha is the stage of sensation. It is the first stage of experience. It is the given. It does not involve the stage of darsana, which is qualitatively different from jñāna. Avagraha is a species of jñāna. Therefore, we describe avagraha as the immediate experience. It is sensation.

Stages in Avagraha

Avagraha has been identified by us with sensation, the immediacy of experience. It is bare awareness of the existence of the object without any determination of its specific features This fact becomes clear if we remember that avagraha has been further distinguished into two stages: (i) vyanjanavagraha and arthavagraha,51 graha is the earlier stage. It is a physiological stimulus condition of the sensation, of the immediate experience. In the Viśeṣāvaśyaka Bhāṣya we get a description of vyañjunāvagraha. There it is said that what reveals an object, as a lamp reveals a jar, is vyañjanāvagraha. It is only the relation of the sense organ and the object in the form of sense stimulation such as sound.52 In the Nandisūtra, we get an example of the earthen

⁴⁷ Stout (G. F.): Manual of Psychology, p. 123.

⁴⁸ Sense-datum theory and observational fact. Some contributions of Psychology to Epistemology: Journal of Philosophy, Jan. 1958.

⁴⁹ Article in the Journal of Philosophy, Jan. 2, 1958, by Charles F. Wallraff.

⁵¹ Pattvärthasūtra, 1. 17-18 Arthasya vyanjanūvagrahah.

⁵² Višesārašyakabhāsya, 191, 193

pot and drops of water, mallaka dṛṣṭānta. It gives a description of the stage of vyanjanavagraha. A clay pot is to be filled with water. In the beginning, when a person pours out one drop of water, it is absorbed and there is no sign of existence of water. He goes on pouring drops of water and at a certain stage a drop of water will be visible. Then the water begins to accumulate. We may call this stage when the water becomes visible the 'threshold of saturation'. The drops of water below the threshold are all absorbed. Similarly, a person who is asleep receives sound stimulation successively for sometime. The sound atoms reach the Innumerable instances have to occur before the ears become full of sound atoms. At a particular stage, the person becomes conscious of the So far he was not aware of the sound although the auditory stimulation was pouring in. We may call this stage of first awareness 'the threshold of awareness'. The sensation of sound starts the moment the threshold is crossed and we become aware of the sound. immediate experience of sound, arthavagraha. So far there was no awareness of the sound although the conditions of stimulation for such awareness were operating below the threshold.⁵⁸ The stimulus was pouring in constantly although no awareness of sound was possible up to a particular stage. Such a preparatory stage of sensation presents physiological and stimulus conditions for the sensational stage. It is indeterminate and undefined. In fact, it is sometimes contended that it is not consciousness at all. Yaśovijaya says that vyañjanāvagraha is cognition only in name. It is only a condition of arthavagraha, which is cognition.⁵⁴ However, the presence of consciousness in vyañjanāvagraha may be admitted, although it is not explicit because of its undeveloped existence.55 In this, the awareness is implicit. It may be referred to as potentiality of awareness. In this sense vyañjanāvagraha is not totally unconscious, because it is this that develops into consciousness.⁵⁶ It is not possible for man to be clearly aware of all the contents in his mind even when he is wide awake. Countless points of consciousness emerge in the course of a single day. Vyanjanavagraha has been just described as implicit awareness, the physiological and stimulus condition of awareness. It gradually develops into awareness and gives the sensation. It is very often described as 'contact awareness'. However, it would not be appropriate to call this 'awareness' although there is the stimulation flowing Awareness gradually emerges later, through the accumulation of stimulation. It is merely potentiality of awareness, or implicit awareness.

Such a stage of potential conciousness may be compared to the unconcious experiences described by Stout. The question of

⁵³ Nandssütra, 34. Mallaku dretanta.

⁵⁴ Jaina Tarka Bhāşā, p. 3.

⁵⁵ Vyšesāvašyakabhāsya, 196.

⁵⁶ Višesāvašyakabhāsya, 196.

unconscious mental states relates to the possibility of there being experiences which may be ours but of which we cannot become aware directly. There are feelings and sensations which do not enter into the stream of our mental life so as to be open to direct observation at the time at which they occur.⁵⁷ Leibnitz has also spoken of unconscious mental states, 'petites perceptions'. Leibnitz's doctrine of 'petites perceptions' enables him to understand how things may be in the mind in an undeveloped way even when we do not seem to be conscious of it. He agrees with Locke that sensations come first. 58 But the unconscious mental states and the 'petites perceptions' imply the presence of a certain experience of which we are not directly aware. If we can know of them at all, as Stout says, we can only do so in the way in which we can come to know the mental dispositions, or as we come to know of mental states in the lower animals. In this sense, although we have compared vyañjunāvagraha to the unconscious mental states of Stout and Leibnitz, we cannot say that they are identical. It is true that there is a remote likeness, but they cannot be similar to each other, because the unconsious mental states of Stout do not accumulate and gradually emerge into consciousness. They are there but cannot be directly observed.

We may take the analogy of the psychological investigations of the Western psychologists in their attempt to measure the intensity of Weber carried on experiments in the direction of measuring the felt difference in the intensity of the sensation. He found that in comparing objects and observing the distinction between them, 'we perceive not the difference between the objects but the ratio of this difference to the magnitude of the object compared'.⁵⁹ If we are comparing by touch two weights, the one of thirty and other of twentynine and a half ounces, the difference is not more easily perceived than that between weights of thirty and twenty-nine drachms. observations can be made about the sense of sight. The difference in the intensity of light is discernible when the ratio of the original stimulus to the increased stimulus is 100:101. Weber said that, in addition, not the absolute difference between the vibration of two tones but the relative difference compared with the number of vibrations of the tones, is discriminated. The original stimulus, whatever its absolute intensity may be, must be increased by a certain constant fraction of its own amount, before any unlikeness in the sensation is discernible, before 'the threshold of discernment' is passed. The constant fraction is different for different kinds of sensation. The basis of the stimulus consists in the

⁵⁷ Stout (G. F.): Manual of Psychology, p. 28

⁵⁸ Rogers (A. K.): A Students' History of Philosophy, p. 320.

^{39 &#}x27;Weber's Law' as formulated by him in a monograph entitled Detactu (1834) See also Weber Fechner Law as stated by Fechner in Elements of Psycho-physics. (1860), translated from the German; VIII. The Measurement of Sensations.

fact that the awareness of sense experience is possible after 'the threshold of awarenes is reached'. This is possible when the stimulus units are accumulated and produce the awareness after the particular stage. Mallaka dṛṣṭānta gives a picture of such a mental process, although quantitative measurement and the experimental basis were not possible.

Arthavagraha

As soon as a person becomes conscious, the stage of vyañjanāvagraha is over and it transforms itself into arthāvagraha. This may be called the stage of sensation proper. It is awareness of the object. In the Nandisūtra, there is a statement that, in this stage, we are aware of the sound as 'this is sound' or 'colour' or 'touch', but not exactly cognize the nature of the sound, colour or touch.59 But in the Visesāvasyakabhās va, this kind of determinate awareness, as 'this is sound' is denied in the stage of sensation. It is merely awareness of the occurrence of the cognition, because it lasts only for one moment. 60 It is, therefore, indeterminate and indefinite. It does not reach the stage of cognition of specific content. In the Viśesāvaśyakabhāsya, there is a discussion of an opinion of the Jaina thinkers who define arthavagraha with reference to the development of personality. It is said that the awareness of a new-born infant is confined to cognition of the general nature only. But, as it gradually grows, it gets sufficient experience and acquaintance with the object, and cognizes specific features of the object even in one instant. This view is criticized in the Viśesāvaśyakabhāsya on the ground that it will lead to an indefinite series of cognitions and that cognition would vary with the extent of the individual's knowledge.61

On the basis of such a distinction regarding the two stages of avagraha, it is stated that vyañjanāvagraha lasts for indefinite moments, gradually proceeding towards the level of consciousness.⁶² The physiological and stimulus conditions of awareness in the form of sensation continue to accumulate for a number of moments till the threshold of awareness is reached. But once the stage of awareness in the form of sensation is reached, it lasts only for an instant, which is an indivisible point of time and is infinitesimal.

We have seen that Western psychologists, like Stout, describe sensations as something of the nature of immediately experienced warm or cold, a specific tinge of pain, touch located in or at the surface of the body, rather than anything outside. Psychologists have extended the term to cover the visual data, the sounds and the smells that may enter

⁵⁹ Nandisūtra, 35.

⁶⁰ Višeņāvašyakabhāsya, 253.

⁶¹ Ibid. 268-269.

⁶² Nandieŭtra, 35.

into immediate experience. Stout further says that all recognition of sensation as of a certain kind, and all apprehension of it as continuing to be of the same nature or as changing in nature at different moments, involves a reference beyond this experience. For, sensation is immediate experience and nothing more. At any one moment there is no other immediate experience except just the experience itself at the moment. Sensations are genuine and factual, while mental constructs are spurious and artificial. Sensations are new, uncontaminated and untouched by those mental processes which render ideas suspect. They are not structured by perception, dimmed and blurred through detention, abridged through forgetting or artificially arranged as a result of fortuitous associations. From Hume to Russell, modern empiricism has tended to regard the inchoate beginnings of knowledge in unformed sensation as more authentic than the cognitive refinement which recent enquiry provides. Se

The Jainas have raised another problem regarding the subdivision of the stages in avagraha, sensational experience. based on the problem of contact of the sense organs with the object, the prāpyakāritva and aprāpyakāritva. This problem has been discussed in the last chapter. According to the Jamas, the visual sense organ is aprāpyakāri, because there is no contact of the sense organ with the object. Other sense organs are prāpyakāri. Vyañjanāvagraha, it is maintained, is essentially concerned with the contact of the sense organs with the stimulus coming from the object, gradually giving rise to awareness of the object. In this sense, according to the Jainas, there are four types of vyañjanāvagraha there being no vyañjanāvagraha for the sense of sight. The visual sense organ is incompetent to establish direct contact with objects of the external world through the stimulation. 65 But, arthavagraha is awareness itself. It is of six types — due to the five sense organs and due to the mind which is a quasi-sense organ. 66 Thus, according to the Jainas, the visual sensation does not require accumulation of the sense stimulus coming from the object. It would mean there is no mental state below the 'threshold of awareness'.

But it would be difficult to justify the view regarding the visual sense in the light of modern science. It may be said that even in the case of the visual sense organ, the light rays have to pass through the lens of the eyes and reach the retina. In this sense, there is contact between the sense organ, the eye, and its object, which is illuminated by light.

⁶³ Stout (G F.): Manual of Psychology, p. 124.

⁶⁴ Sense—datum theory and observational fact. Some contributions of Psychology to Epistemology Article by Charles F. Wallraff, in the Journal of Philosophy Jan 2, 1958, p 23.

⁶³ Nandisütra, 28, and Višesāvašyakabhāsyā. 204.

⁶⁶ Ibid, 29, and Tattvärthasútra

This problem has been discussed in the last chapter. It would, however, not be inappropriate to say that, even in the case of the sense of sight, the physiological and the stimulus conditions are required. Vyahjanavagraha is a necessary stage of arthavagraha. All sensations emerge from the accumulation of the stimulation up to the stage of 'threshold of awareness'. 'Sensation is aroused by the messages which are transmitted through the nerves from the sense organ to the brain; and this is the description of the nature of the sensory message and the way in which it can be recorded and analysed'.67 If the message from the sense organs is crowded closely, the sensation is intense; and if the message is separated by long intervals, the sensation is feeble. Sensations have an upper and a lower limit. They are 'thresholds'. If the stimuli are not sufficient and fall below the threshold, they do not evoke sense experience. They are called sub-liminal stimuli. The sub-liminal stimuli may accumulate and produce the experience. Western psychologists say that sensations have a latency period. This is the time taken by bodily tissues, physiological factors, before they produce their effect. instance, it takes a certain length of time to arouse a sense organ and to excite the nerve fibres that lead to the brain. The brain connections, the motor nerves and also the muscles take time.68

Arthāvagraha, then, is the real sensational stage, the immediacy of experience, while vyañjanāyagraha is a latency stage and the stimulus condition which gradually gives rise to the awareness. However, arthāvagraha is also indefinite and not determinate. According to Jinabhadra the consciousness of a person just awakened from sleep and hearing the sound does not take the form 'this is sound'; because 'this is sound' is determinate and discursive and requires more than one moment for developing. But, the arthāvagraha is awareness of the sound, and it is instantaneous. The cognition 'this is sound' is possible at a later stage, called avāya.

Īkā

Cognition of objects in empirical experience is not complete with mere awareness at the sensational stage. In fact, pure sensations are not possible. As Stout says, we have hardly any pure sensations, absolutely devoid of meaning, either original or acquired, except perhaps in the case of children. Therefore, though sensations are not self-subsistent, they do involve mental factors. They have derivative meaning. All recognition of a sensation as of certain kind involves a reference beyond immediate experience. 'Its identity in nature or difference in nature in relation to the past or possible future experiences

⁶⁷ Adrian (E. D.): Basis of Sensation, Preface.

⁶⁸ Višesāvašyakabhāsya, 252.

can only be an object of thought transcending the immediacy of sense. 69 Sensations transcend the immediacy of experience also because they are inseparably connected with thought. They have reference to external objects. They mean something beyond themselves. For instance, a sensation of red refers to something red or to something which appears red. Thus, absolutely pure sensation is not possible. It is only an abstraction. It always involves some element of meaning or association which makes the experience concrete. Sensations have always a derivative meaning.

In this sense, our empirical experience will not be complete with avagraha. Avagraha is not self-subsistent. It involves meaning and has reference to object. Arthāvagraha, mere awareness of sensation, lasts only for one instant, and it immediately transforms itself into more specific cognition. It brings in īhā, a factor involving meaning. The next stage in experience, then, is *īhā*. In avagraha, there is mere awareness of the object. In *īhā*, the nature of the object is cognized. In avagraha, a person simply hears a sound. In that, he cognizes the nature of the sound also.⁷⁰ In Tattvārthasūtra Bhāsya, we get a description of the factors of experience. Sensation cognizes only a part of the object, while *īhā* strives to cognize specific features. It strives for cognition of the nature of the object. The process of *īhā* continues for a certain period of time, although it never exceeds one muhūrta. Nandisūtra gives five synonyms of īhā; abhoganatā, mūrganatā, gavesanatā and vimarša.71 Umāsvāti gives synonyms of tha as ūha, tarka, vicāraņā and jijhāsā.72 Pūjyapāda Devanandi defines That as striving for understanding the specific character of the object which has been cognized by avagraha.73 Jinabhadra says that it is inquiry for the distinctive features of the object. 4 Akalanka defines that similarly, 75 Hemacandra says that îhā strives for the cognition of the specific details of the object apprehended by sensation. 76 Vyañjanāvagraha is the potential condition of awareness. Arthavagraha is the dawning of awareness. Iha is the tendency towards cognizing the specific features of the object. Iha has been very often translated as 'speculation'. But it would be more appropriate to use the phrase 'associative integration'. However, it would be difficult to find out an appropriate phrase for 'iha', because the synonyms, like cinta and vimarsa, mentioned in Nandisūtra and, like parīksā and vicāraņā, mentioned by Umāsvāti lead to attribute discursive thinking at this early stage of perceptual cognition. What Umasvati and

⁶⁹ Stout (G F.): Manual of Psychology, p 124.

⁷⁰ Nandimura, 35.

⁷¹ Ibid. 31.

⁷² Tottvárthasútra Bhásyn, 115.

⁷³ Sarvärthanddhi 115.

⁷⁴ Viśczdvakyakabhūzya, 180.

⁷⁸ Tattvártharájavárttika, I 15. 2.

⁷⁶ Pramāņamīmāmsā, 127:

Nandisūtra meant by using such terms with the content of discursive thinking as synonyms of tha, it is difficult to know. We may only say that Iha is the first mental association which gives content and coherence to the immediacy of experience in the sensational stage. Mere awareness of the sensation is followed by the cognition of specific features of the object. It is a striving of the mind towards coherence and integration of the sense impressions. In this stage, we get the nature of the object, although it is still in the semi-conceptual stage. Thus, that is a stage in the formation of perceptual experience. It brings in associative integration of sensory elements experienced in the stage of sensation. It is very often said that perceptual experience involves factors like association and selection of the sense data. Perception involves implicit comparison, assimilation, discrimination and integration, It involves association. We perceive a red rose. In this experience, we get the experience of the sensation of red. Other characteristics are associated and integrated and then we perceive the object, the red flower. At least, that is what the earlier psychologists, especially the Associationists, believed. In fact, the Associationists believed that all complex experience can be looked upon as reproduction and association of elementary sensations.

The Jainas thought that, as that is striving for determinate and specific cognition, it is possible to confuse it with doubt, (samsaya). But, that is not to be confused with doubt, although it does involve an element of striving for finding the specific nature of the object. Jinabhadra says that the mental state which refers to many conflicting alternatives where it is difficult to make choice, is the state of doubt. It is a state which is really nescience, (aiñāna). But îhā is the mental state in which there is striving for the ascertainment of truth. to the acceptance of the true and the avoidance of the untrue.⁷⁷ Siddhasena Divākara also draws the same line of distinction between īhā and sāmśaya. For instance, on receiving a sense impression of sound, there arises a doubt whether the sound comes from a conch or a horn. mind is driven to consider the specific points of agreement and difference. It is perceived as sweet and agreeable. This quality is attributed to the sound of the conch and not of the horn. This associative integration. and the striving for cognition of the specific nature of the object, is that. According to this interpretation, it appears that doubt is the beginning of It arises just before that takes form. In the Pramanamimamsa, it is said that doubt crops up in the interval between sensation (avagraha), and associative integration $(\bar{t}h\tilde{a})$, even when the object is a matter of habitual But the existence of the state of doubt is not easily detected owing to the rapidity of succession of mental events.78 But

⁷⁷ Videşävaéyakabhäşya, 183—84.

⁷⁸ Pramāņamīmāmsā, I. 1. 27.

with the introduction of doubt as a stage in the process of perceptual experience before tha, the associative integration becomes more difficult to understand from the psychological point of view. This has been very often responsible for terming $\bar{\imath}h\bar{a}$ as speculation. However, we may say that the doubt which intervenes between sensation and tha, which we have called associative integration, is more a logical expediency than a psychological fact. The Jaina logicians are concerned with finding a logical sequence and consistency in the problem of the theory of the knowledge, rather than in psychological analysis. It is difficult to maintain that $ih\bar{a}$, in the sense of speculation, is a stage which culminates from doubt or from the comparison of various alternative presenta-In this sense, doubt (samsaya) and speculation (îhā) involve an element of discursive thinking which is not possible at this early stage It would be more appropriate to say of perceptual experience. that that it is the associative factor. It integrates impressions to form a concrete psychosis. In the language of the structural psychologists like Wundt and Titchner, such a process of association and integration is a necessary element in perceptual experience, which is a complex experience.

Avava

From the stage of associative integration ($ih\bar{a}$), we come to the Sensations are interpreted and a meaning stage of interpretation. assigned to the sensation. That would be perception. Sensation is the first impresson of something the meaning of which is not cognized. Perception is the interpretation of the sensation, in which the meaning is known. William James says it is 'knowledge about'. This involves perceptual judgment. When we perceive a red rose, our perception involves the cognition, 'this is red rose'. The Jainas said that this stage of perceptual judgment is avaya, although it is still in the non-verbal Avaya follows in the wake of īhā, associative integration. In this stage, we reach a determinate experience. The striving for a cognition of the specific nature of the object results in the definite perception of the object. Avasyakaniryukti defines avaya as determinate cognition. 79 In the Sarvārthasiddhi we get a description of avāya as cognition of the true nature of the object through cognition of its particular characteristics. 80 Umāsvāti says that upagama, upanoda, apavyādha, apeta and apagata are synonyms of avāya. They mean determinate cognition.81 Nandisūtra gives āvartanatā, pratyāvartanatā, buddhi, vijhāna as synonyms.82 Tattvārthasūtra Bhāsya describes avāya

⁷⁹ Vešepāvašyakabhāsya, 179.

⁸⁰ Sarvärthasiddhi, 115

SI Tatträrthasútrabhäsya, 115.

⁸² Nandisütra, 32

as the stage of ascertainment of right and exclusion of wrong.⁸⁸ For instance, on hearing a sound, a person determines that this sound must be of a conch and not of a horn, since it is sweet and not harsh. Harshness is the quality of the sound of a horn. This type of ascertainment of the existing specific feature of the object is called avāya. It is perceptual judgment. It is expressed in the form of a judgment, as 'this is a sound of a conch', or 'this is a red rose.'

Some Jaina logicians say that $av\bar{a}ya$ has only a negative function. In this stage of experience there is merely the exclusion of non-existing qualities. They ascribe cognition of the existing quality to a later stage of experience called $dh\bar{a}ran\bar{a}$. Jinabhadra says that such a view is not correct. He says that, whether a cognition merely does the negative function of excluding the non-existing qualities, or also does the determination of the existing characteristics, or whether it does both, it is still $av\bar{a}ya$ (perceptual judgment). Umasvati seems to hold the view mentioned by Jinabhadra. Pūjayapāda says that $av\bar{a}ya$ cognizes the specific features of the object. Therefore, it is determinate cognition. Akalanka holds a similar view. Vādi-Deva describes $av\bar{a}ya$ as a determination of specific features of the object cognized in the stage of $\bar{i}h\bar{a}$. Hemacandra holds a similar view. He says that $av\bar{a}ya$ is the final determination of the specific nature of the object cognized by $\bar{i}h\bar{a}$. $Av\bar{a}ya$ has been described in this treatise as perceptual judgment.

 $Av\bar{a}ya$ may be compared to the apperception involved in perceptual experience. Perception is a complex experience. The older psychologists analysed perception as involving apperception. Apperception is assimilation of new experiences to old. It is involved in all distinct perceptions, and usually in all attentive perceptions. When we hear the footsteps of someone coming up the stairs, we are only aware through the sense organ of hearing of a sound of a certain type. But that sound is of a particular person who is coming up the stairs, is interpretation based on our previous experience. We then get the experience that we hear the footsteps of a person coming up the stairs. In this stage, what is fragmentary in our experience is supplemented and expanded, and fitted into a system to form a completed picture.

Dharana (Retention)

Now we come to the stage of retention, dhāraṇā, in perceptual experience. Nandisūtra defines retention as the act of retaining a perceptual judgment for a number of instants or innumerable instants. It gives sthāpaṇa and pratisthā as synonyms of dhāraṇā.86 Umāsvāti

⁸³ Tattvärthasütrabhäsya, 115.

⁸⁴ Vrécsavaéyakabhasya, 187.

⁸⁵ Pramāņanayatuttvalokālankāra, II. 9.

⁸⁶ Nandisūtra, 35.

defines dhāraṇā as final determination of the object, retention of the cognition thus formed, and recognition of the object on future occasions,87 According to Umāsvāti, retention develops through three stages: (i) the nature of the object is finally cognized; (ii) the cognition so formed is retained; and (iii) the object is recognized on future occasions. Āvasyakaniryukti defines dhāraṇā as retention.88 Jinabhadra says that retention is the absence of the lapse of perceptual cognition. Like Umāsvāti, he also mentions three stages: (i) the absence of the lapse of perceptual judgment; (ii) the formation of the mental trace; and (iii) the recollection of the cognition on future occasions. In this description, the absence of the lapse, aviccuti, (mental trace), vāsanā, and recollection (smrti), are three stages included in the conception of dhāranā. Pūjyapāda Devanandi defines dhāranā as the condition of the absence of forgetting, in future, of that which has been cognized by avaya. 89 Akalanka says that it is absence of forgetting what has been cognized by perceptual judgment. 90 But some logicians like Vādideva do not accept dhāranā as a condition of recall in future. Dhāranā is a stage of perceptual cognition and cannot last up to the moment of recall. They say it is only establishing perception for a certain length of time.

Thus, we find that some logicians make dhāranā mere retention of perceptual experience, while some others would make it also a condition of recall of that experience at a future time. Those who deny that it is a condition of recall say that it cannot be a cause of recall although it is a remote condition of recall, because recall does require retention of an experience. Vadideva says that the recollection of an experience is due to a special capacity of the soul, which may be called saniskāra.91 Hemacandra entirely agrees with Vādideva's interpretation, although he tries to reconcile the two views. He says that retention is also a condition of recall.92 Hemacandra says that the condition is only the causal stuff capable of effecting recollection of past experience. It is only a mental trace, samskāra. It is the continued existence of a cognition for a definite or indefinite length of time. He further says that the mental trace, or samskāra, is a species of cognition, and not different as the Vaisesikas have stated. If it were not cognition, it would not produce recollection, which is cognitive in nature. Hemacandra reconciles his view of retention as the condition of recall with the view of retention as the absence of the lapse mentioned in Viśesavaśyakabhāsya. He says that retention is the absence of the lapse of perception. But it is included

⁸⁷ Tattvärthasätrabhäsya, I. 15.

⁸⁸ Višesārašyakabhānya, 179. Dhāranam puņa dhāranam 180; ameents dhāranā tassa.

⁸⁹ Sarvārthamddh, I, 15.

⁹⁰ Tattvärtharäjavarttikä, 1-15. 4.

⁹¹ Syádvádaratnákara, 11, 10.

⁹² Pramāņamīmāmsā, I. 1 29. Smrtsheiurdhāraņā

in the perceptual judgment $(av\bar{a}ya)$. That is why it has not been separately mentioned by him. $Av\bar{a}ya$, when it continues for some length of time, may be called retention in the sense of absence of the lapse of experience. It may also be said that absence of the lapse is also a condition of recall in the sense in which he defines $dh\bar{a}ran\bar{a}$. Mere perception without the absence of the lapse cannot give rise to recollection. Perceptual judgments which are not attended by the reflective mental stage are almost on the level of unattended perception, like a person touching grass in hurried motion. And such perceptions are not capable of giving rise to recollection. 98

Hemacandra's description of avaya and his analysis of dharana come nearer to the psychological analysis of perception, specially of the Structuralist school. Perception is a concrete experience in which sensations are organized and interpreted. Meaning is assigned to Without the factor of meaning or interpretation of the impressions, perception would be impossible. Hemacandra's example of the person touching grass in hurried motion shows that 'selective interest' is a necessary condition of perceptual judgment. Such experiences would be on the fringe of consciousness, and they would enter into the focus of consciousness only if forced by factors like nearness or selective interest. Retention is an important condition of perception. In fact, as Stout says, retentiveness is in some form an indispensable condition of mental deve-Mental development would be impossible unless previous lopment. experience left behind its persistent after-effects to influence the mental state in the course of subsequent experience. These after-effects are called traces or dispositions. Hemacandra called them samskara. They are the latent conditions of subsequent experience. However, Hemacandra makes them special capacities of the soul. Mental traces or dispositions bring us to the problem of memory.

However, the analysis of perceptual experience shows that the concrete psychosis involves the accumulation of sense stimuli to produce a cumulative effect. It gradually gives rise to awareness, that is, the physiological and stimulus condition of sense awareness. That is vyañjanāvagraha. It gives rise to awareness of the object. It is a sensation. It is arthāvagraha. Thus, avagraha is a stage of sensation. It is a stage of immediate experience in which we are merely aware of the object of stimulation without knowing anything more of the object. Avagraha, on the whole, is a stage of sensation. But, avagraha is not without the thought element. There can be no pure sensation. Sensations always have a derivative meaning for retentiveness and association operate from the very beginning of life. A sense impression or image has meaning in so far as it refers to something other than itself, in so far

⁹³ Pramānamimāmsā, 1. 1. 29. and commentary.

as it enables us to think of the object. In experiencing a sensation, an object is brought before the mind. The sensation of yellow carries with it the thought of something yellow.94 This leads us to the next stage called that. It is associative integration. In this stage of integrative experience, we do not get the full experience of the object in the form of cognition of the determinate nature of the object in its fullness. In this, we do not form a judgment. In the stage of avaya, we get the perceptual judgment. In this stage, sense impressions are interpreted, and meaning is attached to the experience. We get perceptual judgment in the form: 'this is a red rose'. The implicit presence of the thought element in sensation gets expression and a concrete experience is formed. According to the Jainas, the perceptual experience which they sometimes call avagraha in general, needs to be retained. Otherwise, it would not be complete. Retentiveness is, in some form, an indispenesable condition of mental development. Our subsequent experience depends on the capacity to retain the perceptual cognition. This capacity of retention differs with different individuals. A completed perceptual experience would be possible with all the four stages co-operating. This is the concrete psychosis called perception. As it was pointed out earlier, it is sometimes referred to as avagraha. Īhā, avāya and dhāranā have already been shown to be cases of avagraha. But such identification of the other processes with avagraha was not universally accepted. Jinabhadra says that they are cases of avagraha only by courtesy, upacārena.

The Jainas have given an exhaustive description of the four stages of avagraha, perceptual experience, so far discussed. Each of them is of six types, as they arise from the five sense organs and the mind. Again, vyañjanāvagraha is of four types only. Thus there would be twenty-eight forms of perceptual cognition. Each of the twenty-eight forms, again, is of twelve types according to the nature of the object they can have. Therefore, the Jamas have mentioned that there are three-hundred and thirty-six types of sense experience, matijhāna or abhinibodhika-jñāna. This eleborate classification has no psychological significance, although it has logical and mathematical interest. The Jaina logicians were fond of fabulous mathematical calculations. found in their elaborate classification of karma as given in the Gommata-This is sara: Karma Kanda. Glasenapp in his Doctrine of Karma in Jainism, has given a detailed analysis of this division. The same tendency must have inspired the Jaina logicians to give such an elaborate classification of avagraha.

⁹⁴ Stout (G. F.): Manual of Psychology, p. 193

CHAPTER VI

OTHER SOURCES OF EMPIRICAL KNOWLEDGE

It was seen in the last chapter that the concept of dhāranā has occupied the attention of the Jaina logicians and that they are not entirely agreed on its function. Dhāranā has been considered as a condition of recollection. The psychological analysis of memory shows that retention is a condition of memory, and recollection and recognition are the forms in which memory expresses itself. We are, therefore, concerned here with analysing the concept of memory. We shall study retention, recollection, and recognition as factors involved in memory.

Retention

The Jaina philosophers are not agreed on the function of dhāraṇā, retention. Nandisūtra has mentioned three stages of dhāraṇā. Umāsvāti has also accepted the three stages. They make dhāraṇā a condition of recollection, although some logicians, like Vādi-Deva, do not accept this. It was mentioned in the last chapter that Hemacandra reconciles the two views regarding the function of retention. He makes it both a factor in perceptual cognition and a condition of recall. This raises the problem of the analysis of memory and the function of retention in memory.

Psychological analysis of memory is representative. It is the process of remembering objects of past experience. Perception, on the other hand, is a presentative experience—the interpretation of sense impressions produced by external stimuli. Sometimes, the word memory is used as synonymous with retentiveness in general. But Stout says that this application of the term is inconvenient. Retention is a factor involved in memory. It is, as was stated, a condition of memory. "Memory is ideal revival, so far as ideal revival is merely reproductive and does not involve transformation of what is revived in accordance with present conditions." Hume has said that, when an impression has been present with the mind, it again makes its appearance as an idea; and this it may do in two different ways. In its new appearance it retains a considerable degree of its first vivacity. This he calls memory.2 Retention is a condition of memory. In retention, the past experience is retained in the form of mental traces or mental dispositions, (sanskārās). In physiological terms, it leaves a structural modification in the brain owing to the

¹ Stout (G. F.): Manual of Psychology, p. 520.

² Hume (David): Treatise on Human Nature, Sec. 3.

plasticity of the brain. However, retention is more mental. It is a samskāra which is more cognitive in nature, as Hemacandra stated. The brain cannot be the repository of past experience, as Mill and William James have said. Bain says that the faculty called memory is "almost exclusively found in the retentive power although sometimes aided by similarity." Thus, retention implies the power of preserving in the form of mental dispositions, past perception.

In this sense, the Jaina philosophers called dhāraṇā a condition of recollection. Hemacandra mentions it as a condition of memory.4 In this sense also we can interpret the description of the three stages of retention given in the Nandisūtra and the Tattvārthasūtra Bhāsya,5 The three stages describe stages in the development of memory.6 The first, perceptual experience, should continue to remain in the mind in some Without this, recollection would not be possible. Retention is also a condition of recall. The absence of lapse of experience is necessary for the revival of the experience at a later stage. In the analysis of dhāranā in the second stage, the cognition formed by avāya is retained. This later leads to recognition. Jinabhadra describes the three stages of dharaṇā as (i) the absence of lapse of perception, (ii) the formation of a mental trace, and (iii) the recollection of the cognition on future occasions. Hemacandra points out that perceptual judgment, when protracted for some time, would become retention; and that is the absence of the lapse of perception. But the absence of the lapse of perception is also a condition of recall, because without the absence of the lapse there would be no mental trace and there would be no recollection. Retention, then, is not memory itself although it is a necessary condition of memory, because recollection would not be possible without retention. Formation of a mental trace is an important factor in retention. We have seen that Hemacandra showed that, in a sense, retention can be described as a mental trace, a samskāra. It is a continued existence of a cognition for a definite or indefinite length of time. He says that the mental trace, or samskāra, is cognitive in character It is a species of cognition. The mental trace, or samskāra, may be compared to the mental disposition of the modern psychologists. Some of these give a physiological picture of the mental disposition. They say that past experiences are retained in the form of physiological dispositions. They are not mental traces or mental dispositions. They are only structural modifications of the brain. They are unconscious cerebrations. In this sense, retention would become

³ Bain (A.): The Sense and the Intellect The Intellect (3), as quoted by Rand in Classical Psychology, p. 486

⁴ Prumdyamimāmsa, I. 1, 29

⁵ Nondisütra, 35; Tattvärthasütra Bhāsya, 1, 15

⁶ Mehta (M.): Jama Psychology, p. 82 He describes the psychological process of retention.

merely physiological in nature. It would be merely a neural habit. But this view is not adequate. Past experiences are retained in the form of mental dispositions, although physiological traces may also be there. Mere physiological disposition cannot take the place of mental disposition. Mellone says that they exist in the form of psychological (mental) dispositions, and not merely in the form of physiological dispositions. Stout also maintains that past experiences are retained in the form of mental dispositions which constitute the mental structure. We have seen that Hemacandra has made the mental trace, or sainskāra, of the nature of cognition and not different from cognition as some philosophers, like the Vaiśeṣikas, suppose. If it were not cognition it would not produce recollection, which is cognitive in nature, nor would it be an attribute of the self.

Retention, then, can be described as the mental trace, or saniskāra by which experiences cognized in a definite form by avāya are retained in the mind and they do not lapse. Such retention of past experiences will form a condition of the recall of the experience on a future occasion. Hunter writes, "retaining is a necessary condition for remembering, for without it there would be nothing to remember. Forgetting and retaining are related, for if there is failure to retain then there must be forgetting."

Recollection

The second factor in memory is recollection. Very often, recollection is considered to be a condition of memory, but it would be more appropriate to say that recollection is a form in which memory expresses itself. There is a distinction between recall and recollection. Hunter makes this distinction very clear. For instance, if we remember a poem learnt earlier, it would be recall. But, sometimes, in recalling the poem we remember our personal experiences in learning it. We also remember the page on which the poem was printed and the room in which we learned the poem. That would be recollection. However, such a distinction is not necessary for our discussion. We may take the word recollection in a broad sense as including recall. sometimes term it as recall. Recollection may be termed as reproduction of past experiences. It is the ideal revival of past cognitions which have been retained in the form of mental dispositions. It is the revival of the original experience. It is ideal revival, as Stout says, so far as it is merely reproductive. Retention alone is not, therefore, a sufficient condition of memory. Experiences retained have to be recalled before they become memory. Every psychic process leaves behind some engram-

⁷ Hunter (S. M. L.): Memory Facts and Fallacies, p. 15 (Pelican).

⁸ Ibid. p. 16.

complexes which are conserved in the mental structure of the individual and bring about changes in it. The conserved elements are not the mere mass, but are organized wholes through cohesion, as Drever writes. Such cohesion brings about force and facilitates recall. Perceptual experiences are retained in the form of mental dispositions. This is also Spearman's Law of Retention. Thus, retention is a necessary condition of recall. However, it is not itself recall and should not be identified with recall. We have seen that in the *Pramāṇamīmāṃsā* also there is a description of retention as a condition of recall.

Hemacandra describes the process of recollection. According to him, it is *smrti*. It arises from the stimulation of mental dispositions, *vāsanā*, which may be considered to be equivalent to *saṃskāra*. Perception, once experienced continues to remain in the mind in the form of an unconscious mental trace, or an unconscious mental disposition. This is a latent condition of memory. But when they are stimulated, they come to the surface of consciousness and we recall the experiences which we once cognized and which remained so far in the form of mental traces. Therefore, Hemacandra says that the stimulation of the mental trace gives rise to recollection. The emergence of the latent mental trace by stimulation then, constitutes a necessary condition of recall. Unless the stimulation is present, recall is not possible.

According to the Naiyāyikas, *smṛti* is a form of qualified perception and has reference to the direct presentation of some object, although it involves an element of representation. In memory, there is a revival of past experience in the form of ideas and images, in the same order in which they were actually experienced by us and were retained by the soul.¹⁰

The emergence of the mental trace to the conscious level is, as seen, due to its stimulation. This stimulation is determined by different conditions. The conditions for the emergence of the mental trace to the conscious level may be classed into two types: (i) external conditions, and (ii) internal conditions. The external conditions refer to environmental factors. Observation of similar objects, for instance, is an external condition necessary to arouse the mental trace to the level of conscious state. Mohanlal Mehta, in his Jaina Psychology, has mentioned that external conditions necessary for the fact of recalling may be classed into three types, which represent the three laws of association: the law of contiguity, the law of similarity, and the law of contrast. The recollection of an object experienced in the past refers to the object as "that", "that jar", "that cloth". Perception always refers to the

⁹ Pramānamimāmoā, I, 2, 3. 'Vāsanadbodhahetukā tadstyākārā smrtih'.

¹⁰ Tarkasamgraha p. 85. (Calcutta)

¹¹ Mehta (M): Jama Psychology, p. 87.

present datum, while recollection has a reference to the content as it existed in the past.

Bain says that contiguity and similarity are fundamental bases of the memory habit and that they acquire powers in general. He says that writers on mental science have described the law of contiguity by various names. Hamilton terms it the law of 'redintegration'. "We might also name it the law of association proper, or adhesion, mental adhesiveness or acquisition". Bain says that the second fundamental property of the intellect may be termed consciousness of agreement or of similarity. It is a great power of mental reproduction, or a means of recovering past mental states. It was noticed by Aristotle as one of the links in the succession of our thoughts.¹²

But the external conditions alone are not sufficient. observation of similarity cannot give rise to recollection. It is not a sufficient condition, although it is a necessary factor for recollection. The 'internal competency' is also necessary. This refers to the mental preparedness, or, 'the conative urge'. In this sense, Hemacandra says that, though a disposition may have continued for a certain length of time, it does not operate as a cause of memory unless it is aroused.¹⁸ In this respect, we may mention McDougall's emphasis on the conative drive as a condition of memory. McDougall says, 'like all thinking, remembering is a conative activity. We remember and recollect effectively in proportion as we have strong motives in doing so. This truth is too often ignored; we are apt to regard our memory fantastically as a mysterious automatic machine over which we have no control.' It is notorious that we remember emotionally exciting events better than others; which means that the strength of conation, our interest during any experience, is a main condition of our remembering. There can be no doubt that an explicit volition, purpose, or intention to remember greatly favours remembering and recollecting.14

But even this internal preparedness in the form of interest or conative drive is not sufficient unless some psychic impediments are removed. The fact that our striving to recollect often fails and we get only partial recollection, that we sometimes forget partially or totally, shows that some psychic impediments counteract and come in the way of proper recollection. This is made evident by the study of mental pathology. McDougall says that conation can determine not only memory but also forgetting. Just as desire for an object leads us frequently to remember that object, so aversion to an object (rooted in fear, disgust and painful experiences connected with it) may prevent the remembering of it. It

¹² Bain (A.): Senses and the Intellect, p p. 1-2.

¹³ Pramanamimamsa, I. 2, 3 and Commentary.

¹⁴ McDougall (W.): Outline of Psychology, p. 810.

may even make it impossible to recollect it by the most genuine voluntary efforts. McDougall states that thousands of cases of amnesia of this type occurred among soldiers who suffered the horrors of the front during the First World War.¹⁵ Freud also attributes failure to recollect to wishes repressed in the unconscious. In his *Psychopathology of Everyday-life*, he cites instances of forgetting in everyday life. Thus, in order to get effective recollection, it is necessary to remove psychic impediments like aversion to the object, fear and other painful experiences associated with it.

Such a removal of psychic impediments was, in a sense, mentioned in terms of the removal of karma. Hemacandra says that, in order to arouse stimulations, subsidence and destruction of the obstructive veil of jħānāvaraṇīya karma would be a necessary condition of recollection in addition to observation of similar objects and the conative drive, 16 However, the Jamas mentioned the condition of the removal of psychic impediments in terms of the metaphysical concept of karma and the operation of karma. In fact, the Jamas say that destruction and subsidence of the knowledge-obscuring karma, jħānāvaraṇīya karma, is a necessary condition of all cognition, 17

According to the Nyāya system, while memory has some general conditions, like the original past presentation (pūrvānubhava), and its mental trace, (samskāra), it has a number of specific causes which are responsible for retention of the impressions and their recall in cosciousness on future occasions. Several factors, like attention (pranidhāna), association (nibandha), repetition (abhyāsa), and pāpa and puṇya, ate operative as conditions in producing recollection as also in retaining an experience. Chatterjee, in his Nyāya Theory of Knowledge, mentions twenty-three such causes as given by the Naiyāyikas.¹⁸

The Jainas say that recollection is a valid form of cognition. In fact, it is a source of knowledge, a pramāṇa, because it is never found to be discrepant with fact as in the case of successful activity like search for a thing deposited by oneself. The Vaiśeṣikas and the Advaita Vedāntins also accept recollection as valid cognition. Sometimes, an objection has been raised to the effect that recollection is not a source of knowledge, a pramāṇa, because it does not cognize the present datum and so has no objective basis. The Nyāya system does not admit memory as a separate source of knowledge, because it is only a reproduction of past experience in the same form in which it was once experienced. 19

¹⁵ McDougall (W.) Outline of Psychology, p. 311.

¹⁶ Pramānamīmāmsā, I 2, 3 and Commentary.

¹⁷ Ibid.

¹⁸ Chatterpee (S C.): The Nyāya Theory of Knowledge, Ch. II. p. 25.

¹⁹ Nyāya-Sūtra Vrtti, 1, 1, 3,

The Naiyāyikas say that it is not a presentative knowledge (anubhava). It is only the representation of what was once presented. The object as remembered is different from the object as presented, since the object as presented before, has ceased to exist. The Mīmārinsakas also do not regard recollection (smṛti), as a pramāṇa, since it gives us knowledge of things only previously experienced; it does not give any new knowledge, but only a revival of the same old knowledge. The validity of remembered knowledge depends on the validity of the previously experienced knowledge.

But the Jainas say that, while memory is conditioned by the revival of impressions of past experiences, its essence lies in the knowledge of something as 'that' in the past (tadityākāra). It is the knowledge of what was previously experienced as past. Memory is, in the language of L. T. Hobhouse, assertion of the past as past. memory refers to a previously experienced object, or that it is an assertion of the past, is known by memory itself. The Jainas say that knowledge of the past given by recollection is valid, like perception, because it leads to successful activity. They also give the criterion for establishing the validity of recollection. If recollection were not valid, inference based on vyāpti, the universal relation between the major term and the middle term, would become invalid. Hemacandra points out that recollection refers to an object that has once been experienced, and the reality of the object and not its actually felt presence is the condition of validity for a cognition. If it is contended that the object must be felt as present, as in perception, in order to get valid cognition, we may equally say that perception is also invalid as it is found to lack the criterion of referring to a fact that has been experienced in the past. If revelation of the relevant object be a criterion of validity, it is found to be equally present in the case of memory.

Again, it has been objected that it would be difficult to understand how an object which is deficient can be a generating condition of recollection. But the Jainas say that this objection is also not valid. Cognition reveals its object when it is brought into being by the requisite condition of the operation of the sense organs and mind and the destruction and subsidence of the knowledge-obscuring karmas, just as light which comes into being on the operation of its own conditions reveals objects, like the jar, though not generated by those conditions. Similarly, if recollection is said to be invalid, one must give up inference also, since inference is not possible without recollection of the necessary concomitance.²⁰

Some Vaiseșika writers also contend that *smṛti* (recollection), is a valid source of knowledge. They recognize both *smṛti* and presentative

²⁰ Pramānamīmāmsā, I, 1-3 and Commentary

cognition (smṛtyānubhava), as a form of valid knowledge. Smṛti arises out of impressions of past experience, and it is the knowledge of the individual object 'as that', as something previously experienced, like 'that bathing ghat' and 'that city of Banaras'.

Vallabhācārya also maintains that *smṛti* is a separate *pramāṇa*, because it gives true knowledge of certain facts. Although it depends on previous experiences, it cannot be said to be merely a repetition of some previous experience. It is something more. It gives the experience of the past experience *as* past. Awareness of its being past is not a part of previous experience; and memory gives us the knowledge of this new element.

Among the Western philosophers, Russell, Hobhouse and others recognize memory as a primary source of knowledge. Memory gives us direct knowledge of the past. Russell says that immediate knowledge by memory is the source of all other knowledge concerning the past; without it, there would be no knowledge of the past by inference, since we should never know that there was anything past to be inferred 21 He says that memory resembles perception in point of immediacy and differs from it mainly in its being referred to the past. Hobhouse shows that memory is neither retention of past experience nor a mere image of past experience, but an assertion of it as past on the basis of such retention and images.22 Ewing also thinks that the view of memory as a direct experience is clearly true if we have any knowledge of the past at all. If we know the past, it is the past we know and not the present ideas of the past.23 It is a mistake to suppose, as the Naiyayikas did, that we are directly aware of the past, that the past must be, so to speak, bodily present to our mind or occupy the same position as present objects of perception.

Thus *smṛti*, or recollection, is considered by the Jainas as valid cognition and a separate source of knowledge. In fact, even inference involves memory, because it cannot take place without the recollection of the universal relation between the major term and the middle term,

The validity of recollection as cognition is an epistemological problem, although it has a psychological significance. Recall is a revival of past experience. It has past experience as its basis. But we must remember that perception is one kind of mental event, while recall is a different kind of mental event. It is cognitive in nature and an independent source of knowledge. Drever says that a percept is an event and memory of it a new event. The Jaina analysis of recollection is mainly epistemological, although it expresses the psychological factors

²¹ Russell (B.): Problems of Philosophy, p. 75.

²² Chatterjee (S. C.): The Nyaya Theory of Knowledge, Ch. IV.

²³ Mmd, April 1930, p. 142.

involved in the fact of recollection. The Jainas were primarily concerned with the analysis of recollection as a pramāṇa. The psychological factors involved in recollection were only incidentally referred to. In fact, all Indian thought gives mainly a metaphysical and epistemological analysis of the problems of knowledge, although psychological factors are incidentally mentioned.

Recognition (Pratyabhijña)

Recollection (smṛti), does not give us a complete picture of memory unless recognition as a factor operates. Complete memory involves retention, recall and recognition. We may, however, say that retention is a condition of memory, and recall and recognition are not so much conditions of memory. They are forms of expressing the cognition experienced in the past. Remembering may take different forms. The effects of past learning may manifest themselves through the activities of recall or of recognition and they manifest themselves by making it easier to relearn the original experience.²⁴ Corresponding to these forms of remembering there are different procedures in which memory may be employed as a test for the continued retention of the effects of learning. These are the methods of recall, recognition and relearning.²⁵ We are not concerned with relearning because it is not a valid source of knowledge as such.

Recognition was defined as the remembering of something that was presented to the senses. For instance, as Woodworth mentions, we recognize a friend by his visible appearance or by the sound of his voice. His dog may recognize him by the sense of smell. The other senses may sometimes provide cues for recognizing an object already experienced in the past. 'Cues or signs are used in recognition as they are used in perception. In fact, recognition is a kind of perception. 26 McDougall makes a distinction between implicit and explicit recognition. former is primitive and the latter develops out of it. The dog that runs away at the sight of a man who threw a stone at it, is showing only implicit recognition. The dog does not think 'this is the man who threw the stone'. For us, the utterance of the proper name of the object is an important part of recognition. The similarity of the effect on us is an essential ground of recognition. "The capacity for recognition, and so of all remembering, is at bottom of the fundamental function which James calls 'conception' and which perhaps is better called 'knowing'".27

The question regarding the nature of recognition was discussed by the Nyāya thinkers. Chatterjee mentions a distinction in the meaning

²⁴ Hunter (S. L. M.): Memory-Facts and Fallacies, p. 16, (Pelican).

^{. 25} Ibid.

²⁶ Woodworth (R. S.): Psychology-A Study of Mental Life, p. 569.

²⁷ McDougall (W.): Outline of Psychology, p. 308.

of recognition. It can be understood in two senses. In a wide sense, recognition means understanding the nature of a thing. In this sense it is an ordinary mode of perception. It may be referred to as savikalpa pratykṣa. In a narrower sense, recognition means knowing a thing as that which was known before. Pratyabhijñā is recognition in this sense. According to Naiyāyikas pratyabhijñā is conscious reference of past and present cognition of the same object. I see a jar and I recognize it as something perceived before. Thus I say, "this is the same jar that I saw."28

It has been maintained by some that recognition is a confusion of two cognitions, perception and recollection. The Buddhists think that recognition is a mechanical compound of presentative and representative mental states. It is not a single psychosis because it cannot be perceptual in the absence of a sense object contact. Similarly, they say it cannot be a sumskāra, for there is a sense of thisness in the state of recognition. The Naiyāyikas contend that it is a kind of qualified perception giving us knowledge of the present object as qualified by the experience of the past. We see an object and we recognize it as having been seen on a previous occasion. The Mīmāmsakas and the Vedāntins support this view. But the Jainas argue that the state of recognition is a simple psychosis. It is synthetic in nature and it is different from perception and recollection.²⁹

The Jainas give prominence to recognition as an important form of cognition. Hemacandra describes recognition (pratyabhijñā), as synthetic judgment born of perception and recollection.30 Perceptual experience and recollection work together to produce recognition. They are both combined to form a synthetic judgment born of perception and recollection. They are, therefore, conditions of recognition. Recognition as a synthetic judgment is expressed as 'this is that jar', and 'this is that cloth'. These are cases of identity. We also get recognition as synthetic judgment which expresses similarity in the form of judgment, as 'the cow is like the gavaya.' In this sense, the Jainas make upamāna, a form of recognition, and they do not give upamāna the independent status of pramāṇa. We may also get the synthetic judgment of recognition expressed in the judgment of diffrence. We recognize that the buffallo is different from the cow. Thus, recognition is a concrete psychosis. It is synthetic in nature, expressed in synthetic judgment, like the judgment of identity. the judgment of similarity, and judgment of difference. Perception is the direct and immediate cognition of the object when the object is present to the senses. Recollection is the reproduction, 'ideal revival', of what was experienced in the past. It is the emergence of the mental

²⁸ Nyayabhasya, 3, 1, 7, 3, 2, 2,

²⁹ Prameyakamalamārtuņļa, p. 97-98.

³⁰ Pramāņamīmāmeā, I 2, 4.

trace to the level of consciousness. When perception and recollection are combined in a particular form to produce synthetic experience expressed in a synthetic judgment, we get recognition. a description like, 'know him to be Caitra who is shaggy all over the body, who has protruding teeth, who is dwarfish and who has broad eyes and a snub nose', we make out Caitra when we see him next. Similarly, a man from the North happens to describe a camel as 'a cursed animal with long crooked neck and with ugly limbs, addicted to feeding on hard sharp bramble'. A man from the south who heard this description happens to see a thing of such description, he then recognizes the animal as a camel in the form of a synthetic judgment, 'the object in front is a camel'.81 The Jainas have emphasized the synthetic nature of recognition as an act of cognition. However, it is a concrete psychosis in which the present and the past, perception and recollection are synthesized. In this sense, recognition is different from recollection, although recognition involves recollection as a factor. In recognition, the object is present before us; in recollection, what is recollected is not present to our senses.

A psychological analysis of recognition shows that recognition is a fusion of a percept with an image. Recognition accepts or rejects the object recalled in memory. We recognize when we react to present experience as familiar. The sight of a face, the sound of a note, the smell of a rose, all these may be experienced as being familiar. But we recall a word by speaking it, or we recall past activities after an interval. Hunter makes a distinction between recall and recollection. Recollection involves personal aspects in the memory. Recognition has been described as a mental state which may be definite or indefinite. We may get indefinite recognition in which we only get a feeling of familiarity without getting a definite picture of that experience. Recognition will be definite when it refers to the place and time of the experience. In such recognition we get, as Titchner said, a revival of the cognition of an object once experienced, associated with a group of other ideas and tinged with a feeling of familiarity. Thus, in recognition, the perception of an object and the recall of the percept are synthesized to produce a concrete psychosis of recognition. The Jainas described such a concrete psychosis as recognition, or pratyabhijñā. However, Stout says that recognition in its more primitive form does not require discrimination of the universal from the particular, but only a confused or implicit awareness in which the universal is not separately apprehended as a distinct object of thought. In recognition, there is only a rudimentary judgment of recognition inasmuch as the universal nature of the particular is confusedly apprehended. Yet, there is no judgment in which the subject and the predicate are

³¹ Pramāņamīmāmsā, I. I, 2, 4 and Commentary.

mutually sundered from each other.³² We are not here concerned with the problem of apprehending the distinction between the universal and the particular in perceptual judgment. However, it may not be out of place to say that the Jainas have made recognition a non-verbal form of cognition, in which explicit expression of a judgment in the form of a proposition containing subject and predicate is not possible, although recognition is a form of experience in which we are aware of the similarity or difference of the object which was experienced in the past. In this, we are to understand the description of recognition given in the *Pramānāmīmānisā* as a synthetic judgment, like the judgment of similarity, identity and distinction, although not explicitly expressed in language.

But the content of recognition and the content of recollection are different, because recollection only cognizes what has been known before and refers to its content as 'that'. Recognition establishes the identity of the past datum with the present one.88

The validity of recognition and the nature of recognition as separate source of knowledge, a pramana, has been an important problem in Indian thought. It was very often contended by some schools of Indian thought, like the Buddhists and the Naiyayikas, that recognition is not an independent source of knowledge, a pramāna. say that there is nothing like recognition as a separate source of knowledge, as anything different from cognitive acts like recollection, indicated by the word 'that', and perception, indicated by 'this'. The Naiyāyikas say that recognition is a kind of qualified perception in which the present object is qualified by the distinct recollection of our past experience of it. But the Jainas say that such an objection is not valid, because the object that is known by recognition cannot be comprehended by recollection and perception alone. The province of recognition is the substance which stands out as the identity in and through its antecedent and consequent modes. This identity cannot be the content of recollection, which cognizes only what has been experienced before. But we are aware of the identity of the object experienced in the past with that which is presented to our present consciousness. This identity cannot be cognized only by perception, which is limited to the cognition of the present datum,

The Naiyāyikas maintained, as we have seen, that recognition is nothing but a species of perception. The Sārhkhya theory also brought pratyabhijhā under perception. The eternal buddhi undergoes modification by virtue of which it becomes connected with the different kind of cognition involved in recognition. Similarly, the Mīmārhsakas and the Advaita Vedāntins also hold that recognition is a

³² Stout (G. F.) Manual of Psychology, p. 310.

³³ Tattvasamgraha, 453.

kind of perception. Recognition is that kind of perception in which the object is determined by the name by which it is called, as 'this is Devadatta'; for, according to Advaita Vedantin, pratyabhijñā is a perception of the nirvikalpa type since there is in it no predication of anything about the perceived object, but an assertion of its identity amidst changing conditions. Sarhkara agrees with the Naiyāyikas and the Mīmāmsakas in holding that recognition is a perceptual cognition produced by the peripheral stimulation and the subconscious impressions co-operating together. Kumarila agrees with the Naiyayikas in regarding recognition as a presentative cognition, since it is present where there is activity of the senses and is absent where there is no activity of the senses. We cannot treat recognition, he says, as non-perceptual only, because it is preceded by an act of recollection. In recognition also there is a contact of the sense organs with the object, and wherever there is such contact there is perceptual cognition.84 But the Jainas say that such a view cannot be accepted, because the province of perception is limited to what is actually present and given to the senses. Hence, the identity of the past and the present datum cannot lie within the scope of perception.35

It has been urged that a sense organ, with the help of recollection, does give rise to perception of such identity; and recognition is only a species of perception. But Hemacandra says that this is impossible, because a sense organ cannot go beyond the sphere of the present datum. It is also not true to say that the senses will be able to comprehend identity when associated with recollection, just as the organ of vision acquires additional potency when associated with collyrium. additional efficiency that might be acquired by a sense organ is never found to overstep its proper jurisdiction. Therefore, recognition is not a form of perception. 38 Nor is it mere recollection. It is not even formed by the mere combination of perception and recollection. It is a synthetic judgment which expresses something more than the mere combination. Therefore, recognition is an independent source of knowledge, a pramāna. Hemacandra says that it cannot be said to be lacking in validity, since the lack of discrepancy, which is the criterion of validity, is present in it. On the metaphysical plane, if the identity of the self and the like as determined by the evidence of recognition were to lack objective reality, the logical justification of bondage and emancipation as states of the same ethico-religious aspirant would become impossible. The sense of identity will have a lease of life only if we accept recognition as a valid source of knowledge.37

³⁴ Chatterjee (S. C.); The Nydya Theory of Knowledge, p. 206.

³⁵ Pramanamimāmsū, 1, 2, 3 and Commentary.

³⁶ Ibid.

³⁷ Pramāņamīmāmsā, 1. 2, 3 and Commentary.

This is the picture of the validity of recognition as a source of knowledge. It is mainly an epistemological problem, although it has great psychological significance. Recollection (smrti), and recognition (pratyabhijñā), have been described as forms of memory. Memory expresses itself, as we have seen, in recollection and recognition. We have also seen that recognition is a synthetic judgment in which the identity of the present datum with that which was experienced in the past is expressed, although it is still a non-verbal form of cognition. As it is a synthesis of recollection and perception, it would be difficult to maintain that it is an independent form of cognition, a concrete psychosis. Recognition is a form expressing memory. It is sometimes described as a factor involved in memory. And memory is ideal revival. It is mainly reproductive in nature and does not involve transformation of what was revived in accordance with the present conditions. In this sense, it is not possible to say that recognition is an independent form of cognition, although it may be called a psychosis which is synthesized by recollection and perception. However, the Jainas maintain that recognition is not a species of perception nor of recollection. This view is also true because recognition is not just perception nor recollection. It is a synthesis. The synthesis gives the additional quality judgment of the identity of the present datum with that which was experienced in the past. It may also express similarity and difference. However, this problem is more epistemological than psychological.

Thus, recollection (smrti), and recognition (pratyabhiiñā), have been considered by the Jamas as valid forms of cognition and sources of knowledge. Retention is a condition of recollection as much as it is a condition of perception. The tendency to endure is a prominent factor in retention; and the absence of lapse is itself a tendency to endure. Retention is also a condition of recollection, because the mental trace retained in the mind makes recollection possible when it is aroused and revived. Modern psychologists make retention, recollection and recognition factors involved in memory. We have seen, as Hunter points out, that recollection and recognition are forms of expressing memory, because memory is not a thing containing parts but the mental activity itself, although 'faculty' psychologists made compartments of the mind and memory a faculty of the mind. Even Hume says that an impression makes its appearance in two ways: either it retains a considerable degree of vivacity in its new appearance or it loses that vivacity and becomes an The faculty by which we repeat our impressions retaining the original vivacity is called memory.38 But modern psychologists do not treat memory as a faculty or a thing but as an activity. We may better talk of remembering rather than memory.

³⁸ Hume (David): Treatise on Human Nature, Pt. I, Sect. III.

However, remembering may take different forms. It may express itself through the activity of recall or recognition. In this sense, we may think of recall and recognition as separate and valid forms of memory rather than conditions or factors involved in memory. Smrti and pratyabhijñā would then be the two valid cognitions. However, such an analysis would be more epistemological than psychological.

Inference (Anumana)

We now come to another source of knowledge (pramāna). which is inference (anumāna). The Jainas have mentioned ūhā, inductive reasoning, and sabda, scriptural authority, as separate pramanas. these two are not relevant to our discussion, because they have a more logical than psychological significance. Inference, or anumana, is generally recognized by all the Indian systems except the Carvaka as a pramāna, Inference and reasoning are expressions of thinking as an activity of the human mind. Modern psychologists have begun to take greater interest in the study of the psychology of thinking. Physiological and psychological analysis of the mechanism of thinking have been carried out by psychologists, especially the Behaviourists and the Gestalt psychologists. William James recognizes that thinking of some sort always goes on. But, as Vinacke points out, the fact of thinking presents two sets of phenomena, (i) the psychological process and (ii) the neural process.³⁹ The early philosophers in the West gave prominence to thinking as a special and differentiating quality of man. Man was called homo sapiens. Aristotle said that man is a rational animal. highest form of mental life is reasoning, which utilizes material from sense and imagination, but goes beyond them into the realm of pure ideas. Aristotle worked out a logical system of reasoning which is called traditional logic.* Early Greek philosophers gave theories about reasoning as about other mental states, from logical systematization based on introspection rather than from empirical evidence in the modern sense.40

A similar attitude was present in early Indian thought. The Indian philosophers were concerned with building a logical structure of reasoning and incidentally with the epistemic conditions of reasoning, rather than the psychological analysis of reasoning. The theory of knowledge and the analysis of the epistemic conditions of reasoning had for them a pragmatic value. For the Jainas, as for many other Indian philosophers, the ultimate aim was moksa. The realization of moksa is possible by right knowledge as also by right intuition and right conduct.

³⁹ Vinacke (L. E). The Psychology of Thinking, Ch. V, p. 57.

^{*} Recently Luckassewier in his book Aristotle's Syllogistic has pointed out that Aristotle's logic cannot be identified with traditional logic.

It was, therefore, necessary for them to study the conditions and limitations of knowledge. The Jaina emphasis on the logical and epistemological problems of reasoning expresses the spirit of Indian thought. This study has to be restricted to the nature and conditions of inference as a process of thought. The psychological factors will be referred to, as also the psychological significance of the nature and conditions of inference. This has been included in the discussion because reasoning is a source of knowledge and the analysis of empirical experience would not be complete without understanding the nature and conditions of inference as a source of knowledge.

The Jainas have recognized inference (anumana), as a source of knowledge, (pramāna). Most of the Indian schools of thought, with the exception of Carvaka, have given prominence to inference as a source of knowledge. The Carvakas are materialists. They contend that perception is the only pramāņa. As perception cannot establish a universal proposition, nor can tell us anything about the past and future, perception cannot give us knowledge of vyāpti, which is the universal relation between the major and the middle term and the basis of inference. Therefore, the Carvakas say that inference is not a valid source of knowledge as it has no sound logical basis.41 But the Buddhists have objected to this contention of the Carvakas. The Buddhists say that the Carvaka refutation of inference is itself a process of reasoning. Similarly, it is by inference that the Carvakas came to know that their views were different and that the other sources of knowledge were not valid.42 Hemacandra also says that the Carvakas have to depend on other sources of knowledge, like inference, for the validity of their contention. Since perception will not be able to cognize things in the past and future, even with regard to specific direct cognition, the Carvakas will not be in a position to determine the validity or invalidity of cognition to the satisfaction of others. Perception is subjective and so will not be able to establish the objective validity of inference.48 It was seen earlier that in Plato's Dialogue, Theatetus, Socrates examines the doctrine of knowledge through perception and shows that such a doctrine leads to the impossibility of knowledge. In the Pramanamimamsa, Hemacandra says that the validity even of perception can be established only on the evidence of its unfailing correspondence with fact. Hence it follows that Carvaka must have recourse to a different source of knowledge like inference. The Buddhists have accepted inference as the other source of knowledge. In fact, the Buddhists make all non-perceptual cognition necessarily of the nature of inference.

⁴¹ Radhakrishnan (S.) Indian Philosophy. Vol. I, Part II, Ch. V.

⁴² Pramāņamīmāmsā, I, 1 11. and Commentary

⁴³ Ibid.

The meaning of inference has been a difficult problem in Indian thought, though there has been general agreement on the essential nature of inference. The Jainas say that inference is mediate know ledge. It is knowledge obtained through some other knowledge. Hemacandra says that inference is the knowledge of the major term on the strength of the knowledge of the middle term.44 The Jainas hold that anumana is the process of knowing an unperceived object through the perception of a sign and the recollection of its invariable concomitance with that object. It is called anumana because it is the organ of subsequent (anu) cognition (māna). The knowledge of the major term which is of the nature of authentic cognition of a real fact and which arises from a middle term either observed or expressly stated, is called inference. It is really cognition which takes place subsequent to the apprehension of the middle term and the recollection of the necessary relation of the major term and the middle term.45 In the Jaina Tarkabhāsā, a definition of inference as given in the *Pramāņamīmamsā* is mentioned. Nyāya system has worked out an elaborate system of inference. It is primarily a study of inference. Vātsyāyana, in his exposition of the process of reasoning described by Gautama, asserts that the process of reasoning is extremely subtle, hard to understand and only to be understood by one of much learning and ability. Keith says that the admission of such a nature is important, because it shows how difficult were the first steps of understanding the process of reasoning. 46 Anumana, literally, means knowledge which follows from some other knowledge. knowledge of an object due to the previous knowledge of some sign. linga.47 The previous knowledge is the knowledge of the sign which shows the universal relation between the major and the middle term. Anumana has been defined by the Naiyayikas as knowledge of an object not by direct perception but by means of the knowledge of a linga, or sign, which expresses the relation between the major and the middle term. Bhāsarvajña defines inference as a means of knowing a thing beyond the range of senses through its inseparable connection with another thing which lies within the range of senses. Gangesa defines inference as knowledge which is produced by some other knowledge. The object of inference is the knowledge of some fact which follows from the knowledge of some other fact. By means of anumana we want to know that which may not be perceived but which is indicated by previous perception. For instance, anumana leads to the knowledge of a hill having a fire on the basis of the perception of the smoke on the hill.48

⁴⁴ Pramāņamīmāmsā, I, 2, 7.

⁴⁵ Ibid and Commentary.

⁴⁶ Keith (B.): Indian Logic and Atomism, p. 85.

⁴⁷ Nyayabhasya I, 1, 3, 1.

⁴⁸ Chatterjee (S.C): The Nyaya Theory of Knowledge, Ch. IX, p. 253.

All systems of Indian thought, except the Cārvāka, believe that inference is a process of arriving at truth not by direct observation but by means of knowledge of the vyāpti, the universal relation between two things. The Buddhists believe that inference consists in perception of that which is known to be universally connected with another thing. Such a connection is either due to the principle of causality or to the principle of identity. According to the Vaiseşikas, inference is knowledge derived from the perception of a linga, or sign, which is uniformly connected with something else, such as cause, effect, co-effect and correlative term. The Sāinkhya, Yoga, Mīmāinsā and Vedānta systems define anumāna as knowledge of one term of a relation which is not perceived through the knowledge of the term, but which is explicitly understood as related to the first term. In this sense, inference is a process of thought in which from something known we arrive at something unknown.

In Western thought, Miss Stebbing distinguishes inference from suggestion and recollection. However, it is difficult to distinguish precisely between those experiences in which inference is not involved and those in which it is. Psychologists do not agree as to where the line should be drawn. It is not, however, legitimate to distinguish, she says, between two kinds of inference as psychological inference and logical inference. All inference is psychological, for inference is a mental process; but its validity depends on conditions that are logical. Inference, then, may be defined as a mental process in which a thinker passes from the apprehension of something given-datum-to the apprehension of something related to the datum in a certain way. The datum may be a sense datum, a complex perceptual situation, or a proposition of an inference can always be expressed in a proposition. Hence, inference may be said to be a mental process in which a thinker passes from one or more propositions to some other propositions connected with the former in a certain way.49 Western philosophers and physchologists are not agreed as to the essential marks of reasoning. On the one hand, there are philosophers who regard reason as quasi-divine and a spiritual function, while the materialists and some modern philosophers like Strong, Santayana and Russell have thought of reasoning as merely a complex process of associative reproduction essentially determined by the physico-chemical process in the brain proceeding according to the purely mechanistic laws of habit. From the point of view of psychology, McDougall says that the essence of all reasoning is that a judgment and a new belief are determined by beliefs already established in the mind. If the old beliefs are true and the reasoning process correct, the new

⁴⁹ Stebbing (S.): Modern Introduction to Logic, p. 211,

belief is true and becomes an effective guide to action. In this he includes inductive reasoning also. In the most striking cases, the new belief is derived from a complex chain of processes from a previously established belief: as when the astronomer Adams arrived at the belief that a hitherto unseen planet would be seen at a certain position in the heavens if a sufficiently powerful telescope were directed to that spot.⁵⁰ Some modern psychologists have tried to reduce the whole thinking process to neural activity. They have made it implicit talking. But this problem is not relevant to our purpose.

Inference has been distinguished from perception. It cannot be identified with perception, although both are equally valid sources of empirical knowledge. Perception is independent of any previous knowledge, while inference depends on previous perception. It is sometimes defined by the Naiyāyikas as knowledge which is preceded by perception, It is based on the perception of the relation between the middle and the major term as subsisting in the minor term. Secondly, perception is due to the contact of the sense organs with an object. Hence, perception is limited to the cognition of the present. But in inference it is possible to get knowledge of the past and future in addition to the knowledge of the present. Perception, therefore, is direct immediate knowledge, while inference is mediate knowledge. Hemacandra says that perceptual cognition arises out of the datum present to the senses. It is incapable of taking cognizance of what has preceded and what is to follow. fore, it cannot discern a characteristic capable of determining the validity or invalidity of the individual cognitions occurring before and after. Similarly, it is not possible by means of perception to have acquaintance with what passes in other people's minds.⁵¹ Udyotakara mentions this point when he makes a distinction between perception and inference, Perception is confined to objects of the present time and within the reach of the senses, while inference relates to past, present and future.52 Perception and experimental observation do involve an element of Śarhkara says inference in that the perceived element is interpreted. that where perception is available inference has no place.⁵⁸ Buddhists made another distinction between perception and inference. For them, perception gives, though inexpressible in words, the peculiar character, (svalaksana) of the momentary object, while inference deals with ideal generality (sāmānya laksaņa). But the Naiyāyikas do not accept this distinction. For the Naiyāyikas, perception gives us knowledge of the individual in its concrete detail as well as its generality, while in inference

⁵⁰ McDougall (W.): Outline of Psychology, p. 402.

⁵¹ Pramanamimāmsā, I, 1, 11 and Commentary.

⁵² Nyāya Varttikā, II, 1, 31.

⁵³ Radhakrishnan (S.): Indian Philosophy, Vol. II, p. 73.

we deal with generality only in an abstract form. For instance, we have, on the one hand, before us fire which we perceive; on the other hand, we infer the existence of fire past, present and future as generally connected with smoke.

Types of Inference

Indian logic does not make a distinction between deductive and inductive inference as separate forms of inference. Rather, an inference is a combined deductive and inductive process. Similarly, the distinction between immediate and mediate inference is also not found. All inferences are in the form of categorical syllogisms; and they have both formal and material validity. A distinction between deductive and inductive inference is psychologically inadequate. Vinacke points out that it has become conventional to recognize two broad areas in logic: formal logic, which is called deduction; and scientific method, which is called induction. 'It is now commonly recognized, however, that these distinctions break down in the actual process of reasoning, although deductive inference is often the only observable process in formal syllogistic situations. syllogisms are extended into everyday life so that their origins can be traced, inductive processes occur'.54 Dewey has endeavoured to rid logic of such distinctions as deductive and inductive inference, because both kinds of enquiry are fundamental in science and such a distinction is possible through intellectual analysis. Even the division of inference into immediate and mediate is not psychologically sound. The process of inference is always uniform and one. It is the process of thought in which from something which is already known we arrive at something relating to something new which is not present to the senses. sense, immediate inference is only a brief expression of the process of The main function of mediate inference is to communicate inference. systematically one's own reasoning to others with a view to convincing them or rather with a view to creating similar beliefs in others. sake of our own knowledge and conviction it is not necessary to establish an elaborate system of reasoning in the form of syllogism. In this sense, the division of inference into immediate and mediate has no psychological significance, although it may have logical importance and validity.

In this sense also, it may be said that a distinction has been drawn, in Indian thought, between inference as inference for one-self (svārtha anumāna) and inference for others (parārtha anumāna). Almost all Indian systems have made such a distinction. In the Pramāṇamīmarisā inference has been similarly distinguished. Inference for others is described as syllogistic in nature. Inference for oneself is subjective and 'is calculated to remove personal misconception', while

⁵⁴ Vinacke (L. E.): The Psychology of Thinking, Ch. VI, p. 76

syllogistic inference 'is capable of removing the misconception' of another Subjective inference is also based on the knowledge of the relation of the major with the middle term.50 Still, it needs to be expressed in elaborate syllogistic form. The Naiyāyikas made three classifications of inference: (i) svārtha anumāna and parārtha anumāna; (ii) pūrvavat, sesavt and sāmānyato drstam; and (iii) kevalānvayi, kevalavyatireki and anvaya vyatireki. Keith points out that the distinction in inference as svärtha and parärtha was wholly unknown to Gautama and Kanāda but was accepted by the Syncretist School.⁵⁷ The classification of inference into svārtha and parārtha is a psychological classification which has in view the purpose which the inference serves. 58 reference to the purpose, all inferences are either meant for acquiring some new knowledge for oneself or for the demonstration of a known truth to others. In the svārtha inference, a man seeks to reach a conclusion for himself. In parartha inference, the aim is to demonstrate the truth of the conclusion to others. The conclusion is justified with the help of the middle term. For instance, in the parārtha anumāna a man, having inferred the existence of fire on a hill, lays it down as a thesis and proves it for others.⁵⁹ The other two classifications mentioned by the Naiyāyikas have rather logical significance than psychological value. Regarding the distinction between the svartha and parartha anumana, it may be pointed out that inference for oneself is notional (jħānātmaka), as Dharmottara stated. Inference for others is verbal (śabdātmaka). Keith points out that the Nyaya view of the distinction shows that, in inference as communicated by the syllogism, that is parartha inference, the hearer must perform the necessary mental operation which the teacher has already preformed and which he now helps by syllogistic exposition the hearer to perform for himself. Therefore, it can be said that the svartha inference deals with the process of inference and the parārtha inference is the formal expression in syllogistic form. The first is characterzied as artharūpatva, as Śivāditya showed, the other as śabdarūpatva.

Vinacke points out that, if deduction is regarded as a method by which already existing generalizations are used, it is found that deductive situations are widely encountered in everyday life. They are not always evident as such. They often occur in a disguised and incomplete form. He says that, in general, two aspects of the problem may be distinguished. On the one hand, there are conditions under which the individual argues with other people; on the other, there are more or less

⁵⁵ Pramāņamīmāmski, I, 2, 8 and Commentary: '(at dvidhāsvārtham parārthamca'; Svavyāmohanivartanaksamam svārtham.

⁵⁶ Ibid. 9.

⁵⁷ Keith (B.): Indian Logic and Atomism, p. 95.

⁵⁸ Chatterjee (S. C.): The Nyāya Theory of Knowledge, Ch. XIII, p.289.

⁵⁹ Tarkaeamgraha, p. 48-49, Calcutta.

public arguments to which the individual is exposed. In the first situation, we are obliged to make assertions, develop arguments and state conclusions with a view to communicating and demonstrating them to others. In the second type of situations, we find ourselves reading in the newspapers or magazines arguments presented implicitly or explicitly in deductive form. In all such situations the rules of logic are valuable grounds for valid arguments. Although this distinction between the two deductive situations presented by Vinacke does not exactly correspond to the svārtha and parārtha anumāna, the analysis of the first situation corresponds to Parārtha ānumānā. Parārtha anumāna expresses itself in elaborate argument in syllogistic form.

Conditions of Inference

The aim of inference is to attain some new knowledge of a thing on the basis of whatever has been already known. It arises out of the necessity to know something more, as also out of doubt and anxiety regarding the thing to be known. Where perception is available, inference is not necessary, because we need not reflect much to know objects present to our senses. Inference is not possible regarding either things unknown or things definitely known. It functions only with regard to things that are doubtful.⁶¹ Doubt is a condition of inference. It implies not only absence of certain knowledge about something, but also a positive desire or will to know it. Modern Naiyāyikas do not accept this view, because, they say, there may be inference even when there is no doubt and in the presence of certainty. Similarly, there may be inference even when there is no will to infer. The inference aims at proving that which is yet unproved, as there is a desire to prove the object. At the same time, as Hemacandra says, it is incapable of being contradictory. Therefore, it is generally accepted by all schools that a logical discourse does not come into play in regard to matters which are unknown or definitely established.62 That a state of doubt is a motive of inference is very often recognized in psychology and philosophy. Doubt sets us thinking and gives rise to efforts towards the solution of a problem. The Jama philosophers, in fact all Indian philosophers, have stated that desire to know is an additional factor for inference. So, too, Miss Stebbing shows that doubt is a psychological condition of inference.63

Inference consists in establishing the relation between the major and the minor term. Knowledge of such a relation depends on the

⁶⁰ Vinacke (L. E): Psychology of Thinking, Ch. VI, p. 87.

⁶¹ Nyāyabhāşya, I, 1, 1.

⁶² Promāņamimāmsā, I, 2, 13 and Commentary.

⁶³ Stebbing (8.): Modern Introduction to Logic, p. 215.

knowledge of the vyāpti, universal relation between the major and the middle term. Knowledge of the major term, which is of the nature of authentic cognition of a real fact and which arises out of the middle term either observed or expressly stated, is in fact called inference. It is a cognition which takes place subsequent to the apprehension of the middle term (linga grahaṇa) and the recollection of the vyāpti. Regarding the vyāpti Das Gupta points out that the Jainas, like the Buddhists, prefer antarvyāpti (e. g., relation between smoke and fire) to bahirvyāpti (relation between the place containing smoke and the place containing fire). But Buddhists showed that vyāpti may be based on essential identity, causality, tādātmya and tadutpatti. Experience cannot be the sure ground of vyāpti. But the Vedantins make it the result of inductive generalizations based on simple enumeration. The Naiyāyikas agree with the Vedāntins in showing that vyāpti is established on the basis of uncontradicted experience.

Just as inference depends on the knowledge of the $vy\bar{a}pti$, it also depends on the knowledge of the relation between the middle and the minor term. This is often called pakṣa dharmatā. In inference, the minor term becomes related to the major through its relation to the middle term. Chatterjee points out that, while the validity of the inference depends on $vy\bar{a}pti$, the possibility of inference depends on the relation of the minor with the middle term which is also called pakṣatā. $Vy\bar{a}pti$ is the logical ground of inference, while pakṣatā is the psychological ground of inference. Keṣava Miṣra explains the process of inference as follows: In the first stage the operation leads to the perception of invariable connection between the major and the middle term. This is arrived at from frequent observations of the occurrence of the two in the past.

For instance, smoke is observed on a hill. We then remember the relation which perception has established between smoke and fire. This gives rise to reflection in the form that there is on the hill smoke, which is always accompanied by fire. Then we arrive at the inference that there is fire on the hill. Keith points out that this value of the conception of inference as a mental process is enforced in minute detail by the Nyāya school.⁶⁷ From another point of view, stress is laid on the fact that the subject, the minor term, must be something regarding which there is a desire to establish something else. This desire may be for one's own satisfaction or for that of others. Bosanquet also considers such a mental activity of inferring as the decisive feature of inference.⁶⁸

⁶⁴ Pramāņamīmāmsā, 1, 2, 7 and Commentary

⁶⁵ Das Gupta: History of Indian Philosophy, Vol. I, p. 389.

⁶⁶ Chatterjee (S C.): The Nyaya Theory of Knowledge, Ch. XII, 277.

⁶⁷ Keith (B.): Indian Logic and Atomism, p. 113.

⁶⁸ Bosanquet (B.): Logic, Ch. VII.

The conditions of inference have been discussed by modern Western logicians. Russell seems to think that the psychological element of our knowledge of the propositions and their relations, is not a necessary Validity of inference mostly depends on the condition of inference. logical condition of the implication between propositions. We infer one proposition from another in virtue of a relation between two propositions whether we pereceive it or not'. The mind, in fact, is as purely receptive in inference as commonsense supposes it to be in perception of sensible objects. 69 But W. E. Johnson and Miss Stebbing have recognized both the psychological and the logical conditions of inference. The logical conditions consist in the relation between the propositions. They are called 'the constitutive conditions'. The psychological conditions have been called 'the epistemic conditions' of inference. refer to the relation of the propositions to what the thinker may happen to know.70 Earlier in the chapter, Johnson says that inference is a mental process which, as such, has to be contrasted with implication. The connection between the mental act of inference and the relation of implication is analogous to that between assertion and proposition. Miss Stebbing also shows that inference involves both the constitutive and the epistemic conditions. The epistemic conditions relate to what the thinker who is inferring knows.71

The question regarding the special cause of inference (karana) that brings about the conclusion in inference, has been discussed by Indian logicians. According to the Buddhists, the Jainas and some Naiyāyikas, it is the knowledge of the lingu, the middle term, that leads to the conclusion. The middle term known as such is to be taken as the karana or operative cause of inference. R. S. Woodworth says that reasoning very often depends on the use of the middle term.72 The Mīmāmsakas and the Vedāntins believe that the knowledge of vyāpti is a cause of inference. According to them, the knowledge of the universal relation between the major and the minor term is received in our mind when we see the linga or the middle term as related to the paksa or the minor term. This leads to the conclusion. But according to the modern Naiyāyikas, linga or the middle term cannot be the operative cause of inference. It cannot lead to the conclusion except through the knowledge of vyūpti. Hence, they say that the knowledge of vyūpti should be taken as a special ground (karana), of inference. Vyāpti does directly lead to the conclusion. It has for its function the synthetic view of the middle term as related to the major term, on the one hand, and of the minor term, on the other. This is linga parāmarśa. In this, the middle term is

⁶⁹ Russell (B.): Principles of Mathematics, p. 35.

⁷⁰ Johnson (W. E.): Logic, Part II, p. 8.

⁷¹ Stebbing (S.): Modern Introduction to Logic, p. 215.

⁷² Woodworth (R. S.): Psychology-A Study of Mental Life, p. 805.

considered thrice. Hence, it is maintained by the modern Naiyāyikas that, while knowledge of the vyāpti is a special cause of inference, linga parāmarka is the immediate cause of the conclusion. Some modern Naiyāyikas, in fact, say that *linga parāmarsa* is the operative cause of the conclusion. Bradley's analysis of inference presents a similar picture, The premises, or the data, and the process of inference consist in joining them into a whole by ideal construction.78 However, as Chatteriee points out, linga parāmarša is not an essential condition of all inference although it may make an inference most cogent and convincing. 14 In the case of inference for oneself, we do not require more than the major and the minor premise to arrive at the conclusion. There is a natural transition of thought from the premises to the conclusion. In the case of inference for others, we have to state the identity of the middle term occurring in the two premises and exhibited in the third premise which relates the same middle term to the minor and major terms.

Thus, it is generally agreed that inference is a mental process, and the validity of inference is based on psychological and logical The validity of inference depends on the knowledge of the universal relation between the major and the middle term. It is also based on the perception of the relation between the middle term and the minor. Perception of the minor term as related to the middle term, and the recollection of the universal relation between the major and the middle term, lead to the conclusion of the relation between the minor term and the major. This is the picture of the psychological ground of inference as presented by the Jainas and other Indian philosophers. McDougall showed that all deductive reasoning involves apperceptive synthesis, although it is merely association. It is a process of 'mediate apperception'. In fact, he says, all types of reasoning are processes of 'mediate apperception'. They all make use of the 'middle term', and this use of the middle term is the sole and essential feature of reasoning, in which it differs from other mental processes. 75

Structure of the Syllogism

All systems of Indian philosophy agree in holding that the syllogism represents the typical form of expressing inference for others. However, logicians are not agreed as to the number of propositions constituted in a syllogism. Propositions are called avayavas. Some logicians say that there are ten propositions in a syllogism. For instance, according to the old Naiyāyikas and also according to some Jaina logicians like Bhadrabhāhu, a syllogism consists of ten propositions.

⁷³ Bradley (F. H.): Principles of Logic, Vol. I, p. 259.

⁷⁴ Chatterjee (S. C.): The Nyaya Theory of Knowledge, p. 288.

⁷⁵ McDougall (W.): Outline of Psychology, p. 410 & 413.

But Vätsyäyana states that all the ten members of syllogism are not logically necessary, although they may express the psychological Logicians generally agree that a syllogism has five process of inference. members. Gautama mentioned five members of the syllogism: (i) pratijhā the first statement, or an assertion of what is to be proved, for instance, 'the hill is fiery', is pratijñā. It sets forth the thesis of enquiry. suggestion presented controls the process of inference from the very start; (ii) hetu, states the presence of the middle term. It gives the ground (sādhana), or the means of truth. For instance, it states dhumāt, 'because of smoke'; (iii) udaharana states the universal relation between the major and the middle term and gives examples in support of its contention. It is a combination of the deductive and inductive processes. be compared to Aristotle's major premise with the establishment of the universal proposition by means of examples. It presents an inductive process in stating examples. Dr. Seal writes that the third member of the syllogism combines and harmonizes Mill's view of the major premise as a brief memorandum of like instances already observed with the Aristotelian view of it as universal proposition and a formal ground of induction⁷⁶; (iv) upanaya, the application of a universal proposition with its examples to the subject for the minor term of the inference. It may be called the minor premise of the syllogism. This may be affirmative or negative; (v) nigamana, the conclusion; it states, "therefore the hill is on fire". What is provisionally presented in the pratifiā is finally accepted in the conclusion. The Sāmkhya and Vaisesika systems accept the five membered syllogism. But the Mīmāmsakas and the Vedāntins do not accept the five membered syllogism. According to them, a syllogism does not require more than three members to carry conviction. The two essential conditions of valid inference are the vyūpti and the pakṣa dharmata, the presence of the middle term and the minor term. Therefore, they contend, the three propositions would be sufficient to give full force to the syllogistic inference. The three propositions may be the first three like pratijñā, hetu and udāharaņa, or they may be the last three, like udaharana, upanaya and nigamana. The Buddhists go further than the Mīmārhsakas and reduce the syllogism to two propositions only. This is analogous to the enthymeme in Western logic.

Among the Jaina logicians, Bhadrabāhu seems to be in favour of ten membered syllogisms, as we have mentioned earlier. In his Āvaśyaka Niryukti he describes the ten propositions constituting a syllogism. They are constituted by the pratifiā, hetu and their vibhakti and vipakṣa. Similarly, ākūnkṣa and ākūnkṣa pratiṣedha are the constituent propositions in such u syllogism. Radhakrishnan says that Bhadrabāhu here adopts the double method of proof. When an argument is put

⁷⁶ Seal (B) Positive Sciences of the Ancient Handus, p. 252.

forward, for instance, to prove the non-eternity of sound, the counterproposition is asserted and denied by means of the statement.77 However. Bhadrabahu says that the number of propositions in a syllogism depends on the calibre of the person to whom it is addressed. Accordingly, it may be a ten-membered syllogism or a five-membered syllogism. Neither of these alternatives need be rejected. 'We reject neither'.78 In the Pramāṇamīmāmsā, Hemacandra describes the nature of the five propositions constituting a syllogism.79 Bhadrabāhu's contention that the extent of the constituent propositions depends on the ability of the persons to whom it is addressed, has great psychological importance. It implies that the inference is limited by the capacity of the individual's understanding of the argument presented. Siddhasena Divākara mentions flve members in a syllogism. However, Das Gupta says that, regarding inference, the Jainas hold that it is not necessary to have five propositions in a syllogism. It is only the first two propositions that actually enter into the inferential process. (vide Pramevakamalamārtanda, pp. 108-109.). When we make an inference, we do not proceed through the five propositions. A syllogism consisting of five propositions is rather for explaining a matter to a child than for representing the actual state of the mind in making an inference.80

Aristotle's syllogism is a purely formal and deductive form of inference. We have seen that, in Indian thought, a distinction between deductive and inductive inference is not made. An inference in Indian thought is both formally and materially true. Aristotle's syllogism begins with the major premise, and then it proceeds to apply the universal proposition to a particular case. According to the Jainas and also in all Indian thought, we first get the pratifia or the proposition to be proved. From the psychological point of view, we do not, in fact, proceed in Aristotle's way. We do not begin with the universal propsition and then apply the universal proposition to a particular case, unless it is to be a deliberate form of reasoning formally presented. It would be psychologically correct to say that we first begin by stating what is to be proved, and then find reasons to prove it. Aristotle's syllogism has more of a logical than a psychological status. W. E Johnson says that it is commonly supposed that premises are propositions first presented in thought, and that the transition from these to the thought of the conclusion is the last step in the process. 'But, in fact, the reverse is usually the case, that is to say, we first entertain in thought the proposition that is technically called the conclusion and then proceed to seek for other propositions which would justify us in asserting it.

⁷⁷ Radhakrishnan (S.): Indian Philosophy, Vol. II, p. 81.

⁷⁸ Daśavaikālika-Niryukti, 50. As quoted in Pramāņamīmāmsā, 1, 9.

⁷⁹ Pramāziamīmāmsā, Book II, 1 to 15.

⁸⁰ Das Gupta: History of Indian Philosophy, Vol. I, p. 185.

A conclusion may, on the one hand, first present itself to us as potentially assertable, in which case the mental process of inference consists in transforming what was potentially assertable into a proposition actually asserted'.⁸¹

⁸¹ Johnson (W. E.): Logic, Part II, Ch. I, pp. 1 & 2.

CHAPTER VII

SUPERNORMAL PERCEPTION

Introduction

The nature of empirical experience was discussed in the last chapter. It was, by the earlier philosophers, called paroksa. Later philosophers, trying to adjust the original views with the prevailing concepts of pratyakşa and parokşa called it samvyavahāra pratyaksa and made it arise from the contact of the sense organs and the manas. But the empirical way of knowing may, at the most, give us knowledge of the things of the world through the instrumentality of the sense organs and mind. As such, according to the Jainas, it is not a direct experience. It does not give us knowledge of reality. The Jainas believe that the soul is pure and perfect, and omniscient. But through the obscuration of the soul by the karma, the knowledge that the soul has is obscured and vitiated. Once the veil of karma is removed, the soul knows directly. That is pratyaksa. The knowledge acquired through the sense organs and the munas is knowledge obtained indirectly by means of external sources. The Jainas, therefore, said that such experience is paroksa, or what they later called samvyayahāra pratyaksa. We have, however, the possibility of getting direct and immediate experience without the instrumentality of the sense organs and the manas. The soul directly cognizes as it is freed from the veil of karma. This is pratyaksa. It may be called supernormal perception. Modern psychical research recognizes some such phenomenon and calls it extra-sensory perception.

The problem of supernormal experience is not new. Indian philosophers were aware of supernormal perception. Many of them made a distinction between laukika pratyakṣa, empirical perception, and alaukika pratyakṣa, supernormal perception. All schools of Indian philosophy except the Carvākas and the Mīmārisakas believe in supernormal perception. The Carvākas do not accept any other source of knowledge than sense perception. The Mīmārisakas also deny the possibility of supernormal perception, because, according to them, the past, the future, the distant and the subtle can be known only by the injunctions of the Vedas. Supernormal perception is not governed by the general laws of perception. It transcends the categories of time, space and causality. The facts of empirical experience cannot explain the nature of supernormal perception. However, the Indian treatment of supernormal perception is more descriptive than explanatory. It is not based on experimental analysis. The Indian philosophers arrived at the conception

of supernormal perception through speculation and the higher intuition. Very often, the whole theory of the gradation of supernormal perception is built on the basis of the transcendental experience of the seers. The Nyāya Vaisesika, the Sāmkhya Yoga, the Vedānta, the Buddhist and the Jaina schools of thought believe in supernormal perception, although they have given different descriptions of the experience. According to the Nyāya Vaisesika schools, perception is distinguished into laukika and alaukika. On the basis of the philosophy of the prakrti and the purusa, the Sārnkhya philosophers maintain that supernormal perception can cognize past and future objects, which are really existent as respectively sub-latent and potential. Patanjali thinks that ordinary mental functions can be arrested by constant practice of meditation and concentration. Samādhi is the consummation of the long and arduous process of inhibition of the bodily functions, concentration and meditation. The Vedantists accept Patanjali's view regarding supernormal perception.

In the West, modern scientists have begun to take more interest in such perception, although they call it paranormal, and not supernormal perception. It is also often called extra-sensory perception. The Society for Psychical Research has carried out investigations on this problem. is now recognized that cognitions independent of the senses are possible. Such phenomena as clairvoyance, telepathy and the like have been recorded to prove the possibility of the occurrence of extra-sensory perception. But such psychical research is entirely modern.1 It was founded in 1882. Myers and Henry Sidgwick were the nucleus of research in this field. William Barret, the physicist, was also a member of the Society. Many eminent philosophers and psychologists took keen interest in the investigation of extra-sensory perception. Prof. Bergson, C. D. Broad, L. P. Jacks, H. H. Price and R. H. Thouless are among the supporters of this type of investigation. However, interest in the study of extra-sensory perception may be said to be very old. The first recorded psychical research in the West was carried out under instructions from King Croesus in the sixth century B.C. Wanting to test the powers of the Oracles, he sent embassies with instructions to ask what the King was doing at that time.2 But it was only in the 19th century that systematic study of this problem was started with the establishment of the Society for Psychical Research. The aim of the Society is to approach these various problems without prejudice or prepossession of any kind and in the spirit of exact and unimpassioned enquiry.

Going back to the Indian philosophers of the past, we find that there has been a general recognition of the fact that normal perception through sense organs and mind is not all. In the Nyāya Philosophy,

¹ Tyrrell (G. N. M.): The Personality of Mun. p. 46, (Pelican).

² Flow (A): A New Approach to Psychical Research, Ch. II, p. 6.

specially beginning with Gangesa, the distinction between normal and supernormal perception has been recognized. However, in alauktka pratyaksa the objects are not actually present to the senses, but are conveyed to it through an extraordinary medium. There is, in this, a special sense object contact, alaukika sannikarsa.3 There are three types of supernormal perception (i) sāmānya laksana, in which we perceive the generality in the individual members of a class, for instance, we perceive the universal potness in the perception of individual pots. (ii) inanalaksana, in which we perceive an object which is in contact with the senses, through previous knowledge of itself, for example, when we see a piece of sandalwood there is also a perception of fragrance. This may be compared to what Stout, Ward and Wundt call 'complication'. But it would be difficult to call such forms of perception supernormal. In fact, some psychologists would say it is a kind of implicit inference, although Stout, Ward and Wundt would think of it as a form of perception. However, such perception does not involve anything supernormal. (iii) yogaja pratyaksa, intuitive apprehension of objects, past, future and distant, through some supernormal powers generated in the mind by spiritual concentration.⁵ For those who have attained spiritual perfection such perception is constant and spontaneous. In the case of others who are yet to reach perfection, it requires concentration or *dhyāna*, as a condition. Chatteriee says that we may mention, as cases in point, the theological ideas of eternity and omniscience or intuition in the philosophy of Spinoza Yogaju pratyaksa has a great bearing on the phenomena of extra-sensory perception like Clairvoyance, Telepathy and Pre-cogni-However, yogaja pratyksa may be called supernormal perception. Jayanta describes the nature of yogic perception. The yogi can perceive a past, future, distant or subtle object. He can perceive even dharma.6 Jayanta Bhatta says that a yogi perceives all objects in a single intuition. Similarly, Bhāsarvajñā defines yogic perception as direct and immediate apprehension of objects which are distant or past, future or subtle.7 Prasastapada divides yogic perception into two types, (i) yukta pratyaksa, in which we get perception in ecstasy, and (ii) viyukta pratyaksa, which implies perception of those who have fallen off from ecstasy. Bhasarvajña also makes a similar distinction. Those who are in a state of ecstasy can perceive their own selves, the selves of others, ākāša, time, atoms and manas. Those who have fallen off from ecstasy can perceive subtle, hidden or remote things through the contact of the self, (manas), and senseorgans, with the object by means of a peculiar power due to

³ Chatterjee (S. C.): The Nyaya Theory of Knowledge, Ch. IX, p. 209.

⁴ Ibid. p. 220-

⁵ Ibid p. 227.—Yogābhyāsajanīto dharmavišesah.

⁶ Nydyamañrari, p. 107.

⁷ Nyāyasāra, p. 3.

meditation. Similarly, Neo-Naiyāyikas make a two-fold distinction, between yukta pratyakṣa and vyanjana pratyakṣa. In the latter case, the individual getting the perception is still endeavouring to attain union with the supreme being. Praśāstapāda mentions ārṣa-jñāna as a kind of yogic perception. It is an intuitive apprehension of all objects, past, present and future, and also of dharma owing to the contact of manas with the self and a peculiar power, dharma, born of austerities. It is sometimes said that ārṣa-jñāna and yogic perception are different, because ārṣa-jñāna is produced by the practice of austerities, while yogic perception is produced by meditation. However, both are supersensuous in nature.

But the Mīmānisakas and the Jainas do not accept the possibility of yogic perception because it cannot be either sensuous or nonsensuous. It cannot be sensuous, as it is not produced by contact of the sense organs and the manas. Sense organs cannot come into contact with the past, the future and the distant object. Nor can yogic perception be produced by the mind alone, as the mind, without the help of the senseorgans, is capable of producing only mental states like pleasure and pain. It is not also possible to maintain that the external sense organs can apprehend objects, without coming into contact through the powers of medicine, incantation and the practice of austertities, because the senses are limited in their sphere. They cannot transcend their natural limitations even when they attain the highest degree of perfection by intense meditation. Therefore, the Mīmāmsaks say, yogic perception cannot be sensuous, as sensuous knowledge cannot apprehend past, future and distant objects. Similarly, if yogic perception can perceive what was apprehended in the past, it would be mere recall or a form of memory. But if it cognizes more than what was perceived in the past, it is illusory, as it apprehends something which has no real existence. If yogic perception were perceptual in character, it could not transgress the general conditions of perception, as it must be produced by the contact of the sense organs with the object.

The Jainas also do not accept the possibility of yogic perception as presented by the Nyaya Vaisesika Schools. The Jainas say that sense organs are limited in their sphere and cannot be freed from their inherent limitations. Even the sense organs of the yogis cannot apprehend supersensible objects like atoms. The peculiar power of *dharma* born of meditation cannot be of any use to the sense organs in directly apprehending supersensible objects. *Dharma* can neither increase the capacity of the sense-organs, nor can it merely assist the sense organs in their function of apprehending supersensible objects. Sense organs in themselves cannot apprehend supersensible objects.

⁸ Praéastapādabhāsya, p. 187.

The Nyāya Vaiśeṣika Schools maintain that the manas can get simultaneous cognition of objects past, future and distant with the help of dharma born of yoga. But the Jainas say that the manas, which is regarded as atomic in nature, can never enter into relation with all the objects of the world simultaneously. But it is contended that, if the mind of a yogi can apprehend objects not simultaneously but successively, yogic perception would not be different from ordinary perception. Therefore, the Jainas say, yogic perception in the sense presented by the Nyāya Vaiśeṣika is not possible. Perception of all the objects of the world can never be produced by the external sense organs or by the mind even though aided by the peculiar power of dharma born of meditation. The Jainas contend that it is the self which is responsible for such cognition. The self apprehends all the objects of the world independently of the sense organs and the mind when the veil of karma is progressively removed.

The Jaina View of Supernormal Perception

The Jaina account of supernormal perception is based on the Jaina metaphysics of the soul. In its pure state, the soul is perfect, simple and unalloyed. It is pure consciousness. But when it gets embodied, it moves in the wheel of sainsāra and experiences the things of the world and its pleasures and pains. The sense organs are the windows through which the soul gets empirical experience. They are the instruments by which empirical experience is possible. But when the veil of karma is removed, the soul gets pure experience. The Jainas believe that the soul is inherently capable of perceiving all things with all their characteristics. But this capacity is obstructed by the karmas which obscure real knowledge. Because of such obstruction by knowledge-obscuring and other karmas, it gets only an imperfect knowledge of the objects of the world. The nature and extent of the knowledge the soul gets will depend on the nature and extent of the obscuring veil. But the knowledge of the soul is never totally obstructed by the veil, even as the light of the sun or the moon is never totally obstructed even by the darkest clouds.10 There is always some glimpse of the external world however imperfect it may be. Complete destruction of the veil of karma gives perfect knowledge and omniscience.

On this basis, the Jainas divide pratyakşa into two kinds, (i) samvyavahāra pratyakşa, empirical perception which was originally called parokṣa, and (ii) pāramārthika pratyakṣa, transcendental perception. Empirical perception is what we get in every day experience. It is of

⁹ Prameyakamalamärtanda, p. 5.

¹⁰ Nandisūtra, 42.

three kinds; it may arise (i) from the sense organs, (ii) from the mind. which is a quasi-sense organ, or (iii) from the sense organs and the mind. But as for transcendental perception, the self gets this experience without the help of the sense organs and the mind. It gets the experience directly when the veil of the karma obscuring the knowledge is removed. a form of supernormal perception. It was called pratyasa, because it is the direct experience of the soul without the instrumentality of the sense organs and the mind. It is of two kinds: (i) imperfect, incomplete, or vikala, and (ii) perfect, complete, or sakala. Vikala is divided into two types, (i) avadhi (clairavoyance) and (ii) manahparyāya (telepathy). Perfect transcendental perception is omniscience. It is kevala. This is the stage of supernormal perception. It is the perfect knowledge of all the objects of the world through the complete destruction of the relevant obscuring karmas. It is like the divine omniscience presented by the Nyāya Vaisesika schools and by Patanjali. But the Jainas do not believe in the existence of God. For them, the soul itself is perfect and divine and each individual soul ean attain perfection and omniscience by completely destroying the karnuc matter which is an obstacle to the perfect knowledge. When the veil of karma is destroyed, the soul realizes its According to the Jainas, the soul is inherently capable of omniscience.11 cognizing all things together with all their characteristics irrespective of spatial or temporal distinctions It is only because of the karmic veil that this capacity is obscured. But it is possible that the veil of karma may not all be destroyed although the relevant knowledge-obscuring karma may be removed. Such annihilation of karma may be by degrees-According to the degree of annihilation of karma, the degree of supernormal perception also varies. Omniscience occurs when there is complete destruction of the obscuring veil. But when there are differences in the destruction of these veils the two varieties of supernormal perception, avadhi and manahparyaya, occur. However, the Jainas believe that supernormal perception in the form of avadhi, manahparyāya and kevala are not dependent on the instrumentality of the sense organs and the manas. Only normal perception needs the help of the sense organs and the manas.12 The sense organs have no function in the case of supernormal perception. It may also be said that, even in the case of empirical perception like mati and śrutu, the rôle of the sense organs is subordinate, because the sense organs serve to eliminate the veil of karma which obscures the knowledge of the object. However, they have their own function, because in the absence of these, empirical perception would not be possible. Bhūtabali, in his Mahābandha, sees the instrumental rôle of the manas in the manahparyāya jāāna. But this view need not be taken as representative. 18

¹¹ Pramānanayatatīvaloka of Devasūri, Ch. II, 415

Il Tattvärthasütra, 14.

¹³ Mahabandha, I, 24 (Kashi, 1947 Edition).

Akalanka interprets, in this case, manas as Atman. In this sense, the Jaina view of supernormal perception is different from the alaukika pratyaksa of the Naiyayikas. The forms of alaukika pratyksa are produced by supernormal contact, alaukika-sannikarşa. In this, there is a special type of contact with the sense object. But the Jainas do not accept such a special type of sense object contact. The sense organs are limited in sphere. They do not have the capacity of coming into contact with supersensible objects. The sense organs have no function in the case of supernormal perception, as they cannot cognize the past, future and distant objects. Therefore, empirical perception signifies direct and immediate apprehension of gross objects produced by the contact of the organs with the objects determined in time and space and by merit (punya) and demerit ($p\bar{a}pa$). Supernormal perception is direct and immediate cognition of all objects past, future and distant. Recent psychical research shows that those who are endowed with supernormal powers grasp the secret thoughts of other individuals without using their sense organs. They also perceive events more or less remote in space and time. In supernormal perception, trans-spatial and trans-temporal relations are apprehended. There is an 'elsewhere' in which the order of things would be different. We do not come across the 'elsewhere' by means of empirical experience, because, in this, we become aware of the external world by means of bodily sense organs which have been specially developed to reveal it and nothing else. We may understand this when we realize that our organs of sense perception are narrowly specialized to serve biological and practical ends, and that our normal consciousness is also largely specialized.14

We have seen that the Jainas say that supernormal perception is really pratyaksa, or direct apprehension obtained by the soul when all the impediments are removed. Supernormal perception has been classified as (i) avadhi, (ii) manahparyāya, and (iii) kevala. The distinction between vikala and sakala pratyaksa has also been mentioned. The three forms of supernormal perception mentioned by the Jainas may appear, as Tatia points out, to be dogmatic. However, it may be noted that the vital source of the Jaina theory of knowledge lies in this conception. If the soul has the capacity to know, it must know independently of any external conditions. Distance, spatial or temporal, is not a hindrance to the soul. 15

C. D. Broad says that forms of supernormal cognition may be classified as follows: We may divide them into (i) supernormal cognitions of contemporary events or of contemporary states of mind, and (ii) supernormal cognitions of past or future events or past or future things or persons. Under the first heading, we can include clairvoyance and

¹⁴ Tyrrell (G. N. M.): The Personality of Man, p. 265, (Polican)

¹⁵ Tatis (N.): Studies in Jaina Philosophy, p. 62.

telepathy. 16 In the second type, we may include supernormal cognition of past events, for instance, knowledge of the past as claimed by Miss Moberley in her book An Adventure, and supernormal precognition. knowledge of the future, as is claimed by Dunne in his book, An Experiment with Time. The analysis here will be restricted to the study of clairvoyance and telepathy with reference to avadhi and manahparyaya, Then a brief survey of omniscience, or kevala jñāna, as the Jainas have presented it, will be given. Other forms of extra-sensory perception like mediumship, automatic writing and poltergeists have been of interest to modern psychical research. Flew analyses the forms of extra-sensory perception into spontaneous phenomena, psychical and mental, and mediumship, physical and mental. However, these forms of extra-sensory perception do not come within the purview of this discussion.

Avadhi

Avadhi jñāna is a form of supernormal perception. It is pratyakṣa, or direct perception, because the soul gets direct apprehension of the object without the help of the sense organs and the mind. In this, we apprehend objects which are beyond the reach of the sense organs and the mind. this, we apprehend objects which are beyond the reach of the sense organs. However, in avadhi we perceive only such things as have form and shape.¹⁷ This can be compared with clairvoyance, which modern psychical research calls a form of extra-sensory perception. Things without form, like the soul and dharma, cannot be perceived by avadhi. Clairvoyance of this type differs with different individuals according to their capacity, developed by them through their merit. Owing to the varying degree of destruction and subsidence of the karmic veil, the individual can perceive supersensible objects in different degrees. The highest type of avadhi can perceive all objects having form. The Jainas interpret the capacity of perception in avadhi Jñāna in terms of space and time. They have developed a technique of mathematical calculation of the subtleties of time and Regarding space, avadhi jñānu can extend over a space occupied by innumerable pradesus of the size of the universe. With reference to time, it can perceive through unnumerable points of time both past and future. Avadhi can perceive all modes of all things. But it cognizes only a part of the modes of things according to the degree of intensity of perception. The lowest type of avadhi can perceive an object occupying a very small fraction of space, e.g., the angula. Regarding capacity in terms of time, the lowest type of avadhi can last only a short time, a second. It cannot extend beyond a second. Similarly, it cannot know all the modes of objects. It can only cognize a part of the modes. 18 Thus, avadhi, which

18 Nandirūtra, 16.

¹⁶ Broad (C. D.): Religion, Philosophy and Psychocal Research, p. 29.

¹⁷ Tatwarthusutra, I. 28. Rupisuawadheh also Avasyaku Niryukti, 48, and Nandisutra, 46,

may be compared to clairvoyance, differs with different individuals according to the capacity of the persons perceiving. The capacity is, in turn, determined by the relative merit acquired by the persons.

Modern psychical research has provided many examples of such Experimental investigation has been carried out in this field. For instance, Prof. Rhine and his colleagues at Duke University carried out experiments with a pack of zener cards and arrived at astonishing results. Perception beyond an opaque wall, precognition and foreknowledge have been of great interest to para-psychology.19 Even Kant was greatly interested in ostensible clairvoyance, by Swedenborg, with reference to Queen Lovisa in 1761 and his clairvoyant cognition of the Stockholm fire.20 Dreams which foretell events may also be included in such forms of perception. The Society for Psychical Research has collected many such instances. For instance, the Hon. J. O. Connor, about ten days before the Titanic sailed, saw in a dream that the ship floating in the sea, keel upwards, and her passengers and crew swimming around. In another case, a lady dreamt that her uncle She also dreamt he was had fallen from horseback and died. brought home in a wagon. 'There in my dream the wagon came to the door. And two men, well-known to me, helped to carry the body upstairs. I saw the man carrying the body with difficulty, and his left hand hanging down and striking against the bannisters, as the men mounted the stairs'. Later, the dream recurred thrice, with all the details unchanged. This was followed by her uncle's death in exactly the same situation as she had dreamt, and he was carried home in the same way with his left hand hanging and striking against the bannisters as the men mounted the stairs.²¹ In our country, we get many instances of dreams and such forms of perception. A scientific study of such forms of perception is necessary.

To turn to ancient Indian thought, Prasastapāda and Jayant Bhatta say that, though yogis can perceive all objects past, future and distant, even ordinary persons like us are not entirely devoid of such perception. Some men have the power of perceiving the future. On rare occasions, we get a flash of intuition, as for instance, when a girl perceives in her heart of hearts that her brother will come to-morrow.²² These may be included under the form of avadhi perception. However, they cannot be called supernormal perception. They are extra-sensory or para-normal perception, yet not abnormal mental phenomena. The Jainas also do not make avadhi a

¹⁹ Rhine (J. B.): New Frontiers of the Mind, p. 41, (Pelican).

²⁰ Broad (C. D.): Religion, Philosophy and Psychical Research: Kant and Psychical Research.

²¹ Tyrroll (G. N. M.): The Personality of Man, p. 77, (Polican).

²² Prasastupāda Bhāsya, p. 258, as quoted in Indian Psychology of Perception, Ch. XVIII, Book VII.

form of supernormal perception in this sense, because, according to them, beings living in hell, and even the lower organisms, are capable of possesing avadhi, although, in general it may be included in the supernormal perception. Modern psychical research is also aware of the possibility of such a form of perception in the higher vertebrates. In the commentary on verse V of Dravyasangraha, Ghoshal says that avadhi jñāna is psychic knowledge which is directly acquired by the soul without the instrumentality of the mind and the senses. He cites knowledge in a hypnotic state as an instance of avadhi. But it would not be correct to compare avadhi to knowledge in a hypnotic state, although the description of avadhi as direct cognition without the help of the sense organs and the mind would be correct. The hypnotic state is a state of hyper-suggestion and an abnormal mental state. In this sense, avadhi cannot be called a state of hyper-suggestion and it would not be proper to reduce avadhi to an abnormal mental state.

The Jainas have given a detailed analysis of avadhi and of beings who possess avadhi. According to the Jainas, heavenly beings and beings in hell possess avadhi naturally. They are endowed with it from birth. is bhava pratyaya in them, possibly because they do not possess bodily sense organs like human beings.24 In the case of human beings as well as five-sensed lower organisms, avadhi is possible owing to the destruction and subsidence of the relevant veil of karma.25 It is acquired by merit. Therefore, it is called *gunapratyaya*. Thus, human beings and the lower organisms have to acquire avadhi by effort, while the beings residing in heaven and hell get it naturally27. Viśesāvaśyakabhāsya gives a detailed description of avadhi from fourteen points of view and its varieties with reference to temporal and spatial extension.28 Pañcāstikāyasāra divides avadhi into three types with reference to spatial extension, desāvadhi, paramāvadhi and sarvāvadhi. All three are conditioned by psychic qualities, but desāvadhi is also conditioned by birth in the case of heavenly beings and beings in hell. Desāvadhi is a very limited faculty of perceiving things beyond sense perception. Paramāvadhi is a higher form of perception which is not confined to a limited space and time. But sarvāvadhi is the perfect faculty which perceives all things. Deśāvadhi is divided into two types, gunapratyaya and bhavapratyaya, with their subdivisions.29 Nandisūtra gives six varieties of avadhi which are possible in the case of homeless ascetics. It also mentions subdivisions

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23 Rhine (J. B ): Extra-sensory Perception, p. 177.
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²⁴ Sth-Inangusütra, 71. Tattvārthasūtra, I, 22. Nandusūtra, 7.

Tattvārthasūtra. 173. and Bhāsya—Keayopaśama nimitta. Nandisūtra, 8. Sthānāngasūtra. 71.

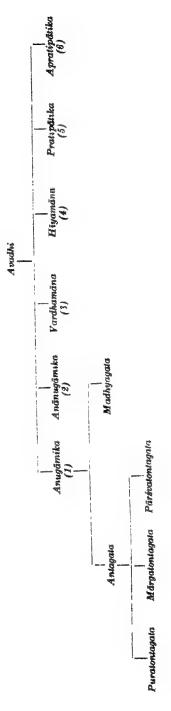
²⁶ Vikeyavahyakabhagya, 572. Nandisütra, 63.

²⁷ Ibid. 574 Tuttvārtharājavarttikā, 1, 22, 3.

²⁸ Ibid. 569

²⁹ Pańcastikāyasāra, 44, and Commentary

TABLE No. VIII



Avadhi jaana has reference to four factors:

Bhāea (4)
Kala (3)
Ketra Kala Bhāv 1) (2) (3) (4)
Draeya (1)

of these.30 A table of classification of avadhi according to the Nandisūtra is given in table No. VIII. The first variety, for instance, is anugāmi avadhi. It is clairvoyance, which continues to exist even if a person moves elsewhere. Ananugāmi avadhi is the opposite of this. māna avadhi is that which increases in extensity and extends in scope and Hīyamāna is opposed to this. Avasthita is durability as time passes. a steady form of avadhi which neither increases nor decreases in scope or durability. The sixth form of avadhi is anavasthitha. It sometimes increases and sometimes decreases in intensity. Such classifications of avadhi with their subdivisions have a psychological significance. It is possible that clairvoyant cognition may differ in different individuals in respect of intensity and durability of experience and the extent of the objects perceived by the individual. There are instances in which some persons get occasional flashes of perception, as in the case of a girl who got the intuition that her brother would come. In some other cases, clairvoyance is more or less steady, and it recurs very often. The Society for Psychical Research has collected many instances of such perceptions.³¹ The scope of clairvoyant cognition with reference to the objects cognized varies with the sensitiveness and extent of contact of the subliminal consciousness. Different persons can perceive different objects with different degrees of clarity according to their capacities. The Jainas have said that the lowest type of avadhi can perceive objects occupying a very small fraction of space like the angula. The highest type of avadhi can perceive all objects having form. However, avadhi cannot perceive all the modes of all things.82

The psychic phenomenon called 'French sensitiveness', sometimes called as 'psychometry', may be included as a form of avadhi, although in psychometry the mind and the sense organs do play their part. There may be physical contact with the object. However, physical contact serves only as an occasion to create a 'a psychical rapport'. The rôle of the object coming in contact with the hand of the person would seem to be rather to canalize the sensitive faculty and concentrate it in the right direction, though we have no information as to how it happens. 33 Dr. Osley gives many instances in which persons having this capacity have given detailed descriptions of the past or the future by merely touching the hand or even by touching a paper written by the person. He gives an experience which he had. An event in his life, an accident, was foretold twice. The man who described the future accident gave a vivid picture of the accident, of the man, a baker, bleeding and things strewn about. The

³⁰ Nandisütra, 15 Tattvärthasütra Bhāsya, 1, 23

³¹ Tyrrell (G. N. M.): The Personality of Man, Ch. XX, XXI.

³² Višesāvašyakabhāsya, 685.

³³ Tyrroll (G. N. M): The Personality of Man, Ch. XX, pp 177-179.

accident occurred exactly as it was predicted. Tyrrell cites many such instances. Dr. Osley says that, if we are to take the language of the permanently metagnomic subjects literally, one might think.....that they perceive realities as if by a paranormal optical sense outside time and They grasp from an ultra-material plane and see things as they would occur.84 There seems to be one major difference between the description of perception given by Dr. Osley and the nature of avadhi. We have seen that avadhi does not make use of the sense organs and the mind. But Osley describes the phenomenon as perception of realities 'as if by a paranormal optical sense outside space and time.' This is not very clear. However, the optical sense outside time and space need not refer to the functions of the physical sense organs. Moreover, Dr. Osley says that the perception is as if by a paranormal optical sense. C. D. Broad admits that clairvoyance is non-sensuous perception. He interprets an experiment with red cards in the following terms: "We shall have to suppose that the clairvoyant has, from infancy, been continuously though unconsciously apprehending directly all those objects which he has also been cognizing indirectly through sight and touch. Then we can suppose that an association would be set up between, e.g. the conscious experience of seeing an object as red and the unconscious experience of directly apprehending it as having that intrinsic characteristic which makes it selectively reflect red-stimulating light-waves. Suppose that, on some future occasion, such an object, though no longer visible, is still being directly but unconsciously apprehended by the He will still apprehend it as having that intrinsic characteristic, whatever it may be, which has now become associated in his mind with the visual appearance of redness. Consequently, the idea of it as a red-looking object will arise automatically in his mind, and he will announce that the unseen object is red". 85 Whatever may be the explanation of clairvoyant cognition, it cannot be denied that such experiences are facts. Eminent philosophers like Sidgwick, Price and Broad have admitted the existence of such clairvoyant experiences.

Mana kparyaya

Now we come to the next form of supernormal perception, called by the Jainas manahparyāya. The Jaina concept of manahparyāya is based on their doctrine of mind. We have seen that mind, according to Jainas, is a particular material substance composed of a specific form of varganās, or group of atoms. It is composed of an infinite number of atoms called manovarganās. There are fine atoms. The finer atoms form

³⁴ Tyrrell (G. N. M.): The Personality of Man, Ch. XX, pp. 177-179.

³⁵ Broad (C. D.): Religion, Philosophy and Psychical Research, p. 45.

³⁶ Avaéyakanıryukti, 76.

the karma. Next in fineness come the manovargaṇās. They occupy less space. The other groups of atoms form the subtle and the gross body. The modes of the mind are different states emerging into acts of thought. Every state of our mind is a particular mode of mind. As our states of thought change, the mind also changes. Every mode of thought is reflected in the mind substance. Direct experience of such modes of mind substance working in other individual minds is called manahparyāya. Āvaśyakaniryukti gives a brief description of the nature of manahparyāya knowledge. Manhparyāya cognizes objects thought of by the minds of other people. The Viśeṣāvaśyakabhāṣya, we get a description of the manahparyāya jħāna. A person possessing manahparyāya directly cognizes the mental states of others without the instrumentality of the sense organs and the mind. He have seen that Bhūtabali admits the instrumentality of manas in this experience, but his view is not generally accepted.

In Western thought, such a form of cognition was called 'thought transference.' But, as Tyrrell says, since the name gives a wrong suggestion that something was being transferred through the space, it is not adequate. Myers coined the phrase 'telepathy' for describing such experiences. Tyrrell gives many instances of telepathic cognition. He also mentions instances of collective telepathy which he calls collective telepathic calculations. In Apparitions, published by the Society for Psychical Research, many interesting examples of telepathic cognition are recorded. It is not possible to go through the many instances of telepathy which Western scientists have recognized.

Coming back to the Jaina view, we find that manahparyāya, telepathic experience, is not easy to get and is not common. A certain physical and mental discipline is a condition for getting their power of intuition. In the Avasykaniryukti we read that manahparyāya is possible only for human beings of character, especially for homeless ascetics. Human beings acquire this capacity through merit and by the practice of mental and moral discipline. In the Nandisātra there is a detailed description of the conditions of the possibility of manahparyāya in the case of human beings. Manahparyāya is possible only in this karmabhūmi, this world of activity, this empirical world. Even the gods are not competent to possess manahparyāya. Only gifted human beings with a definite span of life can acquire this faculty. Some conditions have to be fulfilled and some discipline has to be undergone by human beings for acquiring manahparyāya. The conditions for the possession of

³⁷ Avaéyakaniryukti, 76.

³⁸ Višesāvašyakabhāsya, 669, 814.

³⁹ Tyrrel (G. N. M.): The Personality of Man, p 65, (Pelican).

⁴⁰ Avasyakanıryuktı, 76.

⁴¹ Nandsoutra, 39-44.

manahparyāya are: (i) the human beings in the karmabhāmi must have fully developed sense organs and a fully developed personality. They must be paryāpta; (ii) they must possess the right attitude, (samyagdṛṣṭi). As a consequence, they must be free from passion; (iii) they must be self-controlled and they must be possessed of rddhi, extraordinary powers.

Thus, telepathic cognition is not possible for all beings. Only human beings can acquire it. It is conditioned by a strict physical and mental discipline. The person possessing it must necessarily be a hermit, or homeless ascetic. His character must be of a high type. The discipline and the occult powers attainable by the yogis mentioned in the Patañjali Yoga are analogous to the qualifications of human beings possessing manahparyāya. But Siddhasena Divākara says that lower organisms possessing two or more sense organs are also found to strive by means of attraction or repulsion; therefore, they are possessed of mind. It would hence, be proper to extend the scope of manahparyaya to such lower organisms. It would be improper to postulate manahparyāya as a separate category of knowledge.42 In this connection, we may refer to modern psychical research in telepathy described by Rhine Rhine says that it is possible to find instances of the possibility of such perceptions in the case of lower animals, especially the higher vertebrates. Several experiments have been carried out in this connection and several instances have been quoted.43 But the traditional Jaina view does not accept the possibility of manahparyāya in the case of the lower animals. It restricts the scope of such cognition to human beings.

Objects of Cognition in Manahparyaya

Although there is among the Jamas, general agreement on the nature of manahparyāya, the Jama philosophers are not agreed regarding the objects of the cognition possible in this experience. Various views have been presented. Jinabhadra states that one who possesses manahparyāya perceives the states of mind of others directly. But external objects thought of by the minds of others are only indirectly cognized through inference. Hemacandra, commenting on the statement of Jinabhadra, says that a man may think of a material object as well as of a non-material object. But it is impossible to perceive a non-material object directly except by one who is omniscient. Therefore, one who is possessed of manahparyāya, telepathic cognition, knows external objects thought of by others only indirectly, by means of inference. The function of telepathy is restricted to perceiving mental states, like thoughts and ideas, of others. External objects are the content of these mental

⁴² Niścayadvätrimtika, 17.

⁴³ Rhine (J. B.); Extra-sensory Perception, p. 220.

⁴⁴ Višepāvšyakabhāyya, 814.

⁴⁵ Commentary on Višesāvašyakabhāsya, 814.

states. They are not possible to be cognized directly in manahparyaya. They are known indirectly by inference, as they are associated through the media of states of the mind, although such knowledge is not of the type of ordinary inference. Hemacandra also supports this view of restricting telepathy to cognition of mental states of others. He says that cognition of external objects thought of by others is indirect, as it is by necessary implication from the perception of thoughts which are not possible without objects.46 On the other hand, Umāsvāti says that manahparyāya cognizes states of mind and material objects thought of by the the minds of others. The mind undergoes a process of change while thinking, and the object content of this process is intuited by manahparyāya.⁴⁷ One who is possessed of manahparyaya knows only a fractional part of the objects of clairvoyance. He knows a greater number of the states of the material objects that form the content of the invisible process of the mind. Thus, according to Umasvati, the scope of telepathy is larger, because it includes cognition of external objects thought of by others in addition to But Siddhasena Divākara seems to interpret this statemental states. ment of Umasvati in the light of the view presented by Jinabhadra. He says that objects are cognized indirectly through inference. However, this does not seem to be the proper interpretation of Umāsvāti, because we have seen that objects forming the content of the mind are directly cognized. The statement of Umasvati lends itself to this interpretation. We now come to a third view regarding the object of manahparyāya. This view is presented by Püjypada Devanandi. He says that external objects are also intuited by manahparyāya Manahparyāya is a form of pratyakşa in the traditional sense of the term. It is independent of the instrumentality of the sense organs and the mind. It does not involve inference, which depends on the sense organs such as eyes and also on the information of others. 48 According to his view, manahparyāya has wider scope, as it cognizes external objects directly. We may say it includes avadhi, or clairvoyance, also. There is agreement as to the nature of manahparyāya as pratyaksa, but regarding intuition of external objects there has been a difference of opinion. We have seen that Jinabhadra does not accept the possibility of direct cognition of external objects in manahparyāya. He introduces inference for explaining this kind of cognition. Pūjyapāda Devanandi has widened the scope of manahparyāya by including direct perception of external objects also. Akalanka says that states of the mind are only the media through which external objects are intuited. Umasvati accepted the direct perception of external objects thought of by others in manahparyaya.

⁴⁶ Commentary on Pramanamimamea, I, 1, 18.

⁴⁷ Tattvārthasūtra Bhāṣya, 1, 29.

⁴⁸ Tatteartharajavarttika, I, 25. 6 -7. Nathmal Tatia has ably discussed this problem from the epistemological point of view in his Studies in Jama Philosophy, Ch. II.

The question of the scope of manahparyāya is not psychologically significant. Those who accept telepathy as a form of supernormal experience do not make such a distinction. Telepathy is primarily concerned with cognition of the thoughts of others. It was, therefore, called 'thought transference'. In this, the mental states of others are intuited. But the objects forming the content of the mental states are not excluded from the scope of telepathic cognition, although it is not explicitly mentioned. However, it would also be possible to maintain that cognition of objects forming the content of the mental states may be included in the field of clairvoyant experience, because clairvoyance cognizes objects which are beyond spatial and temporal relations.

Classification of Manahparyaya

Sthānānga recognizes two varieties of manahparyāya as rjumati and vipulamati. 49 Umasvati makes a similar distinction. 50 He says that rjumati is less pure and it sometimes falters. Vipulamati is purer and more lasting. It lasts up to the rise of omniscience. We also get such an account in Pañcāstikāyasāra.51 Rjumati gives a direct intuition of the thoughts of others, while in *vipulamati* the process of knowing the ideas of others is manifested in an irregular way. Pūjyapāda Devanandi describes the nature of manahparyāya as intuition of the objects of the activities of the sense organs.⁵² He says that vipulamati knows less objects than rjumati, but whatever it knows it knows perfectly and vividly; vipulamati is more penetrating and more lucid than rjumati. One who is at the ascending stage of his spiritual development has acquired vipulamati, while one who is sure to descend in the spiritual scale gets rjumati manahparyāya,58 However, telepathic experience is itself possible only for those who have the right attitude, who are free from passions and possessed of rddhi. "It seems that the development of conception of manahparyaya stopped with Pūjvapāda on one side and Jinabhadra on the other. The later Jaina thinkers only took sides with one or the other, but did not make any further development."54

We have seen that, in the West, interest in extra-sensory perception is increasing. It is being investigated on an experimental basis since the establishment of the Society for Psychical Research. Philosophers, psychologists and other scientists have been taking interest in the problem. Prof. Oliver Lodge carried out experiments on telepathy

⁴⁹ Sthänänga, 72.

⁵⁰ Tattvārthasūtra, I, 25 and its commentary.

⁵¹ Pañcâetikâyasāra, 45.

⁵² Sarvärthasiddhi, I. 25.

⁵³ Ibid. I, 24.

⁵⁴ Tatia (N.): Studies in Jaina Philosophy, p. 68.

when he was a Professor of Physics. Some of the Universities in the West have been taking up the study of the problem. Duke University is foremost in this respect. At present, the phenomena of extra-sensory perception, like clairvoyance, telepathy, precognition and mediumship have been accepted as facts. Even psychologists like McDougall are inclined to believe that extra-sensory perception, like clairvoyance, telepathy and foreknowledge, seems also in a fair way established.55 Even critical investigators, like Lehman, admit the existence of genuine telepathy. Dr. Mitchell says that telepathy or some mode of acquiring knowledge which for the present we may call supernormal must be admitted, because if we refuse to accept telepathy we stand 'helpless' in the face of well-attested phenomena which could not otherwise be accounted for. 58 Prof. H. H. Price is of opinion that evidence for clairvoyance and telepathy is 'abundant and good.'57 Prof. Richet admits that telepathic experiences certainly exist. 68 Dr. Rhine, who has done good work on extra-sensory perception, says that extra-sensory perception in the form of clairvoyance and telepathy is an actual and demonstrable occurrence. It is not a sensory phenomenon.⁵⁹ Prof. Myres cites many instances of telepathic intuition. He mentions the publication called Apparitions, which gives many instances. However, Myres says that the evidence for telepathy does not rest entirely on instances of such description. Other sources of evidence of the existence of telepathy are possible to any one who has not a strong apriori objection to it.60

Several theories have been presented to explain the phenomenon of extra-sensory perception. Some scientists have explained telepathy in terms of physical radiation. It is sometimes said that telepathy is an experience in which an idea present in the conscious mind of A is transferred to the conscious mind of B by some process resembling that of radio-telepathy. Dr. Tuckett says that admission of telepathy means nothing more than believing in the existence of vibrations in ether resulting from and acting on nervous matter. Similarly, Prof. Ostwald has proposed a physical theory of telepathy. He says that a transpiration of known psycho-physical energies into unknown forms is projected through time and space and and is received by the percipient. But scientists like Myres, Tyrrell, Barrett and Mrs. Sidgwick show that such a physical theory of telepathy is not adequate. Telepathy is more a psychological fact than a physical phenomenon. Tyrrell shows that the physical theory

⁵⁵ McDougall (W.): Riddle of Lafe, p 235,

⁵⁶ London Times, dated 6th September 1937, as quoted in Jaina Psychology p. 100 by Mohanlal Mehta.

⁵⁷ Philosophy, October 1950.

⁶⁸ Richet: Thirty Years of Psychical Research, p. 23-21.

⁵⁹ Rhine (J. B.). Extra-sensory Perception, p. 222

⁶⁰ Tyrrell (G. N. M.). The Personality of Man, p. 26

of telepathy does not work. He has given his own explanation of telepathic experiences on the basis of Myer's explanation. He bases his own explanation on the assumption of the subliminal self. In telepathy, a signal is made to the conscious by the subliminal self of the percipient, which may take the form of a sensory hallucination or some other form. The importance of telepathy lies in the fact that it reveals the subliminal portion of the human personality at work. 61 Similarly, more comprehensive theories that embrace clairvoyance and telepathy have been mentioned by Rhine. He, however, says that evidence for E. S. P. is good but the theories are bad.62 Flew has mentioned two current theories of telepathy: Carrington's theory, and the Shin theory put forward by Thouless and Weisner. But there is a strong case for saying that the research situation is not right for theory construction'.68 However inadequate may be the explanations given by the various theories mentioned above, psychical phenomena like clairvoyance and telepathy are at present established facts. Few deny the existence of such phenomena; and the question whether such phenomena contradict an established law of nature, like the law of causation, is irrelevant. 'The apparent contradiction arises because we have decided that anything which happens at all must happen in the world order with which we are familiar'. Similarly, we labour under the impression that all that is known is known through the sense organs. But, once the idea has been grasped that the organs of sense perception are narrowly specialized to serve biological and practical ends; that our normal consciousness is also specialized and largely focussed on consciousness: that our body is highly specialized; that, in fact, as a psycho-physical being the human individual represents a special adaptation to the sensory world, it becomes easier to contemplate an 'elsewhere', that is to say, a continuation of the order of existence beyond the familiar, 04 The psychical phenomena of extra-sensory perception seem to contradict the law of causation, because we have been accustomed to take cause in a narrow and traditional sense. The trouble comes from using a concept of cause which has not been adapted to cope with psi. Russell's suggestion of mnemic causation shows how 'we might adopt the concept cause'. We might invent a 'psi-causation'.65

However, the Western analysis of extra-sensory perception like clairvoyance, telepathy, foreknowledge and mediumship shows that they are experiences possible for man, for some men for all time and perhaps for all men for some time. Western scientists make these phenomena paranormal and extra-sensory occurrences. A superstructure of experi-

⁶¹ Tyrrell (G. N. M.): The Personality of Man, Ch. VII, p. 72 (Pelican).

⁶² Rhine (J. B.): Extra-sensory Perception, Ch. II, p. 39.

⁶³ Flew (A.): A New Approach to Psychical Research, Ch. IX, p. 132.

¹⁴ Tyrrell (G. N. M.): The Personality of Man, Ch. X, p. 265 (Pelican).

⁶⁵ Flew (A)- A New Approach to Psychical Research, p 127.

mental investigation is being built for explaining these occurrences in man. Western scientists prefer to speak of extra-sensory perception rather than supernormal perception, which we have mentioned with reference to the Indian view of such experiences. Rhine says that 'extra-sensory' perception is preferable to 'supernormal perception' because of the ambiguity of the term supernormal in psychology. 66 But the Jaina analysis of avadhi and manahparyāya shows that avadhi may be called paranormal, although it is not found in all human beings, while manahparyaya may be called supernormal cognition. We have seen that avadhi is possible even for sub-human beings and lower organisms and also for the denizens of hell. These beings get it at birth, while in the case of human beings we acquire This shows that avadhi need not be termed as supernormal cognition. But manahparvaya is restricted to human beings. Even the gods residing in heaven cannot possess it. Only those human beings who have fully developed sense organs, who have the right faith and self-control and who are free from passions can get the experience of manahparyāya. These are the gifted few among human beings. Therefore, manaliparyaya may be included in supernormal perception. The Western approach to the problem of extra-sensory perception is analytic and critical. A good deal of experimental investigation has been carried out in this connection. The Western approach aims at finding experimental justification and a scientific explanation for the existence of such phenomena. scientists believe that it is possible for ordinary human beings to get such experiences sometimes. But the Jama approach, like all other ancient Indian attitudes, is speculative. The ancient seers have experienced or observed the existence of such phenomena. The Jaina view of such supernormal perception is based on the intuition of the prophets and the philosophic contemplation of the saints.

Kevala

According to the Jainas, the soul in its pure form is pure consciousness and knowledge. It is omniscient. But it is obscured by the karmas, just as the moon or the sun is liable to be obscured by the veil of dust or fog, or by a patch of cloud.⁶⁷ The obscuration of the soul is beginningless, although it has an end. The veil of karma obscuring the perfect knowledge of the soul is capable of being removed by the practice of meditation and contemplation and by the practice of self-control, just as the obscuration of the sun or the moon can be removed by a blast of the wind.⁶⁸ When such a veil of karma is removed, omniscience dawns. That is kevala jñāna, a stage of perfect knowledge and the stage of

⁶⁶ Rhme (J. B.) Extra-Sensory Perception, Preface.

⁶⁷ Pramāņamīmāmsā, I, 15 and Commentary.

⁶⁸ Ibid.

kaivalya. Perfect knowledge is gained by the total destruction of the four types of karma—jhānāvaraṇīya, darśanāvaraṇīya, mohanīya and antarāya karmas. The total destruction of the mohanīya karma is followed by a short interval of time called muhūrta, which is about forty eight minutes. After an interval of less than a muhūrta, the other karmas obscuring jñāna and darśana and antarāya karma are destroyed. Then the soul shines in all its splendour and attains omniscience. The moment the darkening karmic substance of the six leśyās is removed, ignorance disappears.

The Jainas are agreed on the nature of omniscience. Omniscience intuits all substances with all their modes.⁷¹ Nothing remains, unknown in omniscience. There is nothing to be known and nothing is unknown. It is the knowledge of all substances and modes of the past present and future, all in one. It is lasting and eternal. It is transcendental and pure. It is the perfect manifestation of the pure and the real nature of the soul when the obstructive and obscuring veils of of karma are removed.⁷² This omniscience is co-existent with the supreme state of absolute clarity of the life monad! This is precisely the release. longer the monad dimmed with the beclouding of passions but open and free and unlimited by the particularising qualities that constitute individuality.78 The moment the limitations that make particular experience possible are eliminated, perfect intuition of every thing knowable is attained. The need of experience is dissolved in the infinite_this is the positive meaning of kaivalya. Zimmer says that one is reminded of the protest of the modern French poet and philosopher Paul Valery in his novel Monsieur Teste. 'There are people,' he writes, 'who feel that the organs of sense are cutting them off from reality and essence knowledge, a cloud obscuring the essence of being; the shining moon, like darkness or a cataract on the eye! Take it all away, so that I may see'. Zimmer writes, 'This outcry, together with the modern theory of knowledge from which it arises, is remarkably close to the old idea to which Jamism holds: that of the limiting force of our various faculties of human understanding'.75

There has been a controversy regarding the nature of omniscience, the nature of jñāna and darśana at the highest stage of kaivalya. Some philosophers like Umāsvāti say that in the case of the omniscient, kevala jñāna and kevala darśana occur simultaneously at every point of time. Kundakundācārya states that there is simultaneous occurrence of

⁶⁹ Tattvārthasūtra, 10 with Bhāsya.

⁷⁰ Sthänängasütra, 226.

⁷¹ Tattwarthasūtra, 130 with Bhasya; also refer Ārasyakanıryuklı, 77.

⁷² Zimmer (H.): Philosophies of India, p. 251.

⁷³ Ibid.

⁷⁴ Pramanamimamea, I, 1, 15 and Commentary.

⁷⁵ Zimmer (H.): Philosophies of India, p. 261.

both jñāna and darśana in the omniscient stage just, as the light and heat of the sun occur simultaneously. But Siddhasena Divākara does not accept the distinction between jñāna and darśana in the omniscient stage. Jinabhadra, on the basis of the spiritual texts, supports the view of successive occurrence of jñāna and darśana in this stage. This problem has already been referred to in our discussion on the relation between jñāna and darśana. But the Jainas never questioned the occurrence of omniscience for a purified soul, although they had some differences of opinion regarding the possibility of the occurrence of jñāna and darśana in this stage.

We now come to the criticism of the possibility of omniscience, as presented by the Jainas. The Mīmārisakas are not prepared to accept the possibility of the occurrence of omniscience, and have raised a series of logical objections. According to them, omniscience cannot mean knowledge of all the objects in the world, either at the same time or successively. Nor can omniscience be knowledge of archetypal forms and not of particular things. There can be no omniscience, as the knowledge of the past, present and future can never be exhausted. Moreover, if all objects were known in omniscience at one moment, the next moment there would be a state of absolute unconsciousness. The omniscient, again, would be tainted by the desires and aversions of others in knowing them.

But the Jamas refute the arguments of the Mīmārisakas against the occurrence of omniscience. In the Pramānamīmāmsā we get such refutation of the Mīmārhsaka arguments. Similarly, the Mīmārhsaka objections have been refuted by Prabhacandra in Prameyakamalamartanda. The Jamas say that it is not correct to deny the occurrence of omniscience as the Mīmāmsakas do. Omniscience is the single intuition of the whole world, because it does not depend upon the sense organs and the mind. The pure intuition of the omniscient self knows all objects simultaneously, at a single stroke, since it transcends the limits of time and space. Prabhacandra says that the Mîmārhsaka objection that the omniscient soul would be unconscious themoment after the occurrence of omniscience is not correct, because it is a single unending intuition. For the omniscient, cognition and the world are not destroyed the moment the omniscience is possible.76 Similarly, the Jainas contend, as against the Mīmārisakas, that the omniscient soul knows the past as existing in the past and the future as existing in the future.77 The omniscient self is absolutely free from the bondage of physical existence as past, present and future. In fact, the Mīmārhsakas also admit that, in recognition, we apprehend in a flash of intuition, the past as well as the present in one cognition, while pratibhā jñāna, in empirical

⁷⁶ Prameyakamalamārtaņda, p. 67.

⁷⁷ Ibid.

life, can apprehend the future as future. It is, therefore, possible for the white omniscient soul, who is entirely free from the fetters of karma, to have a super-sensuous vision of the whole world, past, present and future, by a single unending flash of intuition. In the Pramāṇamīmārisā, the possibility of the occurrence of omniscience is logically proved by the necessity of the final consummation of the progressive development of knowledge. There are degrees of excellence in knowledge, and the knowledge must reach its consummation somewhere. That is the stage of omniscience, when the obscuring karmas are totally annihilated.

We may briefly refer to the distinction in 'kevala jñāna' mentioned in the Nandisutra. Kevala jñāna is of two types, (i) bhavastha, the omniscience of the liberated who still live in this world, as for instance the omniscience of the Tīrthaṅkaras; and (ii) the omniscience of one who is totally liberated, who may be called siddha. The bhavastha omniscience is, again, of two types (i) sayogi and (ii) avogi. There are subdivisions in both these. Similarly, siddha omniscience is of two types, (i) anaṅtara kevala and (ii) parampara kevala, each having its own subdivisions. The classification of omniscience as described in the Nandisūtra is given in table No. IX. This classification of omniscience into various types is not psychologically significant. It has possibly arisen out of the general tendency, mentioned elsewhere, for mathematical calculations and minute classifications.

The Jaina view of omniscience may be compared to the Nyāya view of divine knowledge 80 and the yoga theory of divine perception.81 Divine knowledge is all-embracing and eternal. It has no break. It is a single all-embracing intuition. It is perceptual in character, as it is direct and not derived through the instrumentality of any other cognition. The divine perception grasps the past, the present, and the future in one eternal 'now'. The soul, according to the Jainas, is itself divine and perfect, and there is no transcendental being other than the individual soul. Each soul is a god by itself, although it is obscured by the karmic veil in its empirical state. The kaivalva state of the individual soul may be compared to the divine omniscience. However, the Naiyāyikas and Patañjali admit that man has sometimes a flash of intuition of the future and can attain omniscience by constant meditation and practice of The Jainas believe that, by the removal of obscuring karmas by meditation, the threefold path and self-control, the individual soul reaches the consummation of omniscience, the state of kaivalya. the finality of experience. But others, like the Naiyāyikas, posit a divine omniscience which is higher and natural and eternal.

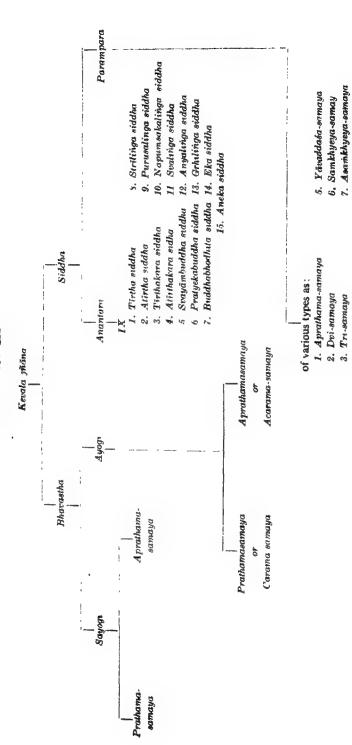
⁷⁸ Pramāņamīmāmšā, I, 1, XVI and Commentary.

⁷⁹ Nandisūtra, Gatha 19-23, and dissenssion.

⁸⁰ Nyāyamañjari, p. 200.

⁸¹ Yogasütra, I, 25.

TABLE No. IX



8. Ananta-samaya

4 Catus-samaya

It is not possible to establish the possibility of omniscience on the basis of the methods of investigation which psychology and the empirical sciences follow. However, its logical possibility cannot be denied. Progressive realization of greater and subtler degrees of knowledge by the individual is accepted by some psychologists, especially since the introduction of psychical research for analysing the phenomena of extra-sensory perception. A consummation of this progressive realization would logically be pure knowledge and omniscience, a single all-embracing intuition.

CHAPTER VIII

THE JOURNEY OF THE SOUL

(The Doctrine of Gunasthanas)

"Man's history", writes Tagore, "is the history of his journey to the unknown in quest of the realization of the immortal self—his soul".1

In the Homeric epic, Ulysses descended to the nether world to seek counsel of the departed, and there he saw the shades of his former companions who were killed in the siege of Troy. They were but shadows, but each one retained his original form. For the Western mind, personality is eternal. It is indestructible, not to be dissolved. the basic idea of the Christian doctrine of the resurrection of the body. In the Western thought, the individual retains the individuality he had in his empirical life. When the play is over, the persona cannot be taken off; it clings through death and into the life beyond. 'The occidental actor, having wholly identified himself with the enacted personality during his moment on the stage of the world, is unable to take it off when the time comes for departure, and so keeps it on indefinitely, for millenniums -even eternities-after the play is over'.2 But, as Zimmer says, Indian philosophy, on the other hand, insists on the difference emphasizing the distinction between the actor and his role.3 Indian philosophy emphasizes the contrast between the empirical existence of the individual and the transcendental nature of the self which is unaffected by the vicissitudes of empirical existence.

The Jainas believe in the inherent capacity of the soul for self-realization. Self-realization is not the realization of the empirical self, but the realization of the transcendental self. The goal is to reach perfection, 'siddhahood'. In the Tattvārthasūtra we get an account of the nature of the soul as possessing the characteristic of ūrdhva gati, tendency to move upwards. It is the tendency of the soul to escape from the cycle of worldly existence and to reach perfection. This tendency, this force leading upwards, is called the centrifugal force. The capacity of the soul for perfection is, however, obstructed by the obscuration of the soul by the veil of karma. The tendency for upward motion is thwarted by the perversity of attitude, mithyatva that develops through the accumulation

¹ Tagore (R.) Sādhanā, p. 33.

² Zimmer (H.): Philosophies of India, p. 237.

³ Ibid.

⁴ Tatia (N.); Studies in Jama Philosophy, p. 269

The soul gets caught in the wheel of samsara and forgets its The first three types of passions obscure the effort for the real nature. search for truth (samyaktva), capacity for partial renunciation. (desayirata caritra), and the capacity for the full realization of the self. effort for the search for truth is thwarted and the effort takes the direction of untruth. Still, the desire and the capacity to ascertain the truth about the things of the world, remains unobscured. This is explained on the analogy of the clouds. The pure and perfect knowledge is still possible, although it is covered by mithyatva. The attainment of samyaktva is a necessary condition of the way to the realization of the self. By the destruction and subsidence of the veil of karma which obscures the knowledge and activity of the soul, the soul attains samyaktva and knows its real nature. It is reminded of the great mission it has to realize. is aroused to active spiritual exertion. It is awakened from nescient slumber, and its inherent capacity for self-realization gets expression. It now knows that it has to escape from the wheel of sainsāra to get to the realization of itself. This is the awakening of the soul. Sometimes the awakening comes through the instruction of those who have realized the truth. But sometimes it is aroused by its own efforts without any Jainism does not believe in the revelation of truth like the outside help. Vedānta and the Mīmārisā schools, nor does it accept the Yoga and Nyāya Vaisesika view that the supreme deity reveals the truth. The Jainas believe that the soul has an inherent capacity for self-realization.

But self-realization is a long process. It is an arduous and difficult path. It is a fact of common experience that different individuals have different degrees of power to realize the stage of perfection. In the course of its eternal wandering in various forms of existence, the soul sometimes gets an indistinct vision and feels an impulse to realize it. This is due to the centrifugal force. Such an awakening does not always lead to enlightenment and spiritual progress. The soul has to go through various stages of spiritual ups and downs before the final goal is reached. These stages of spiritual development are by the Jainas called guṇasthānas. They believe that there are fourteen such stages of spiritual development. These stages are linked up with the stages of the subsidence and destruction of the karmic veil. In its journey to perfection, the soul passes through an infinite number of states, going from the lowest to the highest stages of spiritual development,

We shall now consider the journey of the soul through the fourteen stages of spiritual development as the Jainas describe them. Gunasthāna refers to the state of the soul at a particular stage in its spiritual development with reference to the nature of jñāna, darśana, and caritra, through the operation, subsidence and destruction of karma.⁵

⁵ Abhidhanarajendra, Vol. III, Gunaethana.

The soul passes through an infinite number of states in its journey. stages which the soul has to go through have been classified into fourteen stages. They are called gunasthanas. In the Gommatasara, we get a list of fourteen gunasthanas with a detailed description of each stage. fourteen gunasthānas are as follows: (1) Mithyādrsti, perversity of attitude; (2) Sāsvādana samvagdrsti, transitory stage of the right attitude; (3) Samyag-mithyādrsti, the right and the wrong attitude mixed; (4) Avirata samyagdṛṣṭi, right attitude, but having no moral self-control; (5) Deśavirata samyagdrsti, right attitude, with limited moral self-control; (6) Virata, partial self-control; (7) Pramatta virata, imperfect self-control; (8) Apūrva karana, new thought effort; (9) Anivetti karana, advanced mental effort. This is also called anivittibādara-samparāya; (10) Sūksma samparāya, the slightest mental disturbances; (11) upaśānta kaṣāya, suppression of mental disturbances; (12) Kṣīṇa kasāya, destruction of mental disturbances like delusions; (13) Sayoga kevali, the stage of omniscience while still in the bodily existence; and (14) Ayoga kevalī, the stage of omniscience and perfection after throwing off all bodily bonds. After the last gunasthana the soul becomes liberated. The first four stages of spiritual development have no moral flavour and do not involve any moral effort. All other stages are combined with moral effort. In all these different stages, the mental efforts for the realization of the different stages of spiritual development are innumerable. But the classification of the mental efforts into, fourteen spiritual stages has been possible as they present prominent factors in the progress of self-realization.6

We have referred to the innate tendency of the soul to escape from the wheel of samsāra. The soul possesses the characteristic of ūrdhva gati. This tendency is the centrifugal force which leads the soul along the path of liberation. This tendency to struggle for emancipation remains dormant in souls still clouded by the veil of karma. The counteracting forces, like the passions, obstruct the progress of the soul in the path of These are the centripetal forces which keep the soul tied to the wheel of samsāra and make it difficult for it to escape from the bonds of empirical existence The centripetal forces mainly consist of perversity of attitude, in fact, of the obdurate perversity, and the passions that cloud the purity of mental life. In its wanderings in the wheel of samsāra, the soul, as we have seen, sometimes gets the vision of the goal of liberation and of the way towards this goal. It also feels an urge to make efforts to reach the goal. This urge is the expression of the centrifugal force. It manifests the energy called yathāpravrttakarana. Višesāvasyakabhāsya describes the process of operation of this energy towards self-realization. The yathāpravṛttakaraṇa, the energy for effort, lasts only for some time,

⁶ Gommajasāra : Jīvakāņļa, Verse 10.

⁷ V isesävasiyakabhāsya, 1204—1217.

for less than a muhūrta, about forty-eight minutes. The soul feels during this mental state a kind of uncasiness with the worldly existence. It becomes aware that this empirical life, the life in this world, is meaningless. It also sees the possibility of emancipation from this empirical existence. If the impulse which creates such dissatisfaction with the worldly existence and a restless desire to struggle for emancipation, is strong, then the soul cuts the cluster of karmic matter called the granthi. The soul is then successful in some measure in its struggle to free itself from the bondage of worldly existence. It is set on its way to liberation. The struggle consists in the twofold process known as apūrvakarana and anivettikarana. Labdhisāra describes the different stages of the progress of the soul on the way to self-realization by means of these two processes, The process of attainment of self-realization takes four forms: (1) a certain measure of subsidence and destruction of karmic matter; (2) purification of the soul as a result of such process; (3) the possibility of getting instruction from the sages; and (4) reduction of the duration of all types of karmas except in the ayu karma. However, such a process of purification and the efforts for self-realization are not possible for all souls. Some souls are not capable of such spiritual efforts to the extent of reaching the highest perfection. They are called abhavya jivas. It is only for the souls which are embodied, possessing five sense organs and mind and fully developed, that efforts towards self-realization are They are called bhavva jīvas. In such cases the soul gets an indistinct awareness of the sufferings of the world and a vision of the way to liberation through the impulse of yathaprayrttakarana. an awareness is not alone sufficient for the upward journey of the A more powerful expression of the energy would be required for the purpose of a fuller and more successful struggle for self-realization. The soul that lacks energy fails to fulfil its mission and withdraws from The energy of yathapravrttakarana which leads the soul in the direction of self-realization manifests itself in two processes, apūrva karana and anivetti karana. The karana is the spiritual impulse that leads the soul to fulfil its mission and to realize the goal. Karmaprakrti gives a detailed description of the two processes that operate in the efforts to realize the self. Thus, the inherent impulse of yathapravrttakarana leads to the vision of the goal and makes efforts possible. In its efforts to self-realization, the soul finds that it has to face innumerable difficulties in the form of karma granthi. These hinder the efforts for enlightenment. The processes of apurvakarana enable the soul to clear the obstacles in the form of karma granthi, while anivettikarana leads it to the verge of the dawn of enlightenment. The enlightenment comes like a flash through the subsidence and destruction of the mithyātvamohanīya karma. This is

⁸ Labdhisāra, 8-7.

possible because of the fundamental characteristic of the soul in its tendency to upward motion. The struggle for liberation goes on with the help of the two processes mentioned above. This is the journey of the soul along its homeward path. The progress of the soul in its homeward journey takes fourteen stages till the final goal in perfection is realized. These fourteen stages are the gunasthānas.

The soul gets the first spiritual vision from the subsidence of the karmic matter and removal of the perversity of attitude, the mithyātva. But this spiritual vision does not in the beginning last long. But the soul remains restless and struggles in a number of ways to recapture the vision and keep it permanently. This struggle is long and arduous. remove gradually the five conditions of bondage—mithyātva, perversity of attitude, avirata, lack of self-control, pramada, spiritual inertia, kasaya, passion and trigupti, threefold activity of body, speech and mind. subduing of passions is an important condition of spiritual progress. It is possible only by the operation of the processes of yathaprayrttakarana manifesting in the forms of apūrvakaraņa and anivīttikaraņa. progress of the soul in all the fourteen stages is possible in two ways: (1) the soul may suppress the passions, when, as a consequence subsidence of the karma would take place This is the path of suppression or subsidence. It is called upaśama śreni, (2) The soul may also go the way of annihilating the karmus altogether. This spiritual path is called ksaya Thus, the soul goes the way of self-realization by the paths of subsidence (upasama), and destruction, (ksaya) of the karmic veil. In the highest stage of self-realization, the soul reaches the stage of perfection and omniscience. This is the fourteenth stage and the consummation of the struggle.

Discussion of the Fourteen Stages

We shall now refer briefly to the fourteen stages of spiritual development. These stages represent the journey of the soul to self-realization.

of attitude and is called *mithyātvadṛṣṭi*. In this stage, we accept wrong beliefs and are under the false impression that what we believe is right. We look at every thing through coloured glasses. We refuse to recognise that we are wrong. It is a stage of wrong belief which is caused by the operation of *mithyātva karma*. However, the soul is not entirely bereft of an indistinct vision of the right. This is possible because the soul cannot be entirely bereft of the possession of the right knowledge. The soul has at least the minimum degree of right vision in this stage, although the latter is entirely clear. Though the soul has, the capacity of removing the perversity by means of the right vision, it is still, under the

veil of perversity. The perversity of wrong belief consists in not having belief in things as they are. Wrong belief is of five kinds: (i) one-sided belief (ekānta); (ii) perversity of belief (viparīta). For instance, the practice of sacrifice of animals is due to perversity of belief. In this, we forget that all lives have to be respected. We ignore the fundamental equality and dignity of the individual souls in whatever state they are: (iii) veneration of false creeds, called vinava. It refers to the acceptance of a false creed; (iv) doubt, which is responsible for instability of faith, (samsaya), as when we are not prepared to accept either of two beliefs; (v) indiscreet acceptance of any view although it is perverse and wrong, ajñāna.9 The soul, suffering from perversity of attitude, does not relish the truth, just as a man suffering from fever has no taste for sugarcane juice.¹⁰ This state of the soul refers to the perversity which may give rise to intellectual aberrations like false ideologies in social, political and religious life. Even souls that have cut the karma granthi and have experienced spiritual vision may fall back to this stage of perversity. For instance, a man who has known the right view may fall back and be perversely fanatical in the wrong faith. However, such men are not totally condemned, because, for them, there is a possibility of regaining the lost vision. They have tasted the right vision, and when the occasion arises they will realize that they have fallen back and try to free themselves from their perversity of attitude. This is not so easy for those who are still in the lowest stage of spiritual development, since they have never had a glimpse of the right vision.

(2) The next stage is the sāsvādana samyagdrsti. transitory stage, as it is an intermediate stage in the fall from the heights of samyaktva. The soul halts while falling from a higher stage of spiritual development. For instance, at the end of the period of the dawn of enlightenment life-long passions envelop the soul, and there is a fall to a lower stage. From the higher stage of samyaktva the soul comes down to wrong belief, but it has neither the right belief nor a fanatical perversity of attitude. This is called the doubtful stage, or sāsvādana. 11 The mental states in this stage are said to be in a transitory condition. acquired the right belief but it has now come down, although the fall is not to the lowest stage. The minimum duration of the fall in this stage is one instant of time (samaya), and the maximum is avali, six wings. During this fall, the soul has neither the right belief nor the wrong belief, because the karma which is responsible for the perversity of attitude (mithvātva) has not yet begun to operate. It is possible that after one avali the mithyātva karma may begin to operate again, when it falls

⁹ Gommatasāra . Jīvakānda, 15.

¹⁰ Ibid., 17.

¹¹ Gommajasära: Jīvakāņda, 20.

to the lowest stage of mithyātva dṛṣṭi. Putting this description into language common, we may say that those who strive and get the right attitude towards life and the right view about the things of the world in social and political life, may begin to hesitate and fall back on false views through the loud propaganda of the false beliefs. Such a transformation may take place through intense propaganda and countersuggestion. This stage of hesitation before accepting the false belief with a fanatical perversity may be called the sāsvādana stage. Propaganda clouds the right view and leads to hesitation. It may bring a person down to false belief. However, men who have already known what is right and have accepted right faith for some time may not remain in this stage for a long time. There is, further, a possibility of redemption.

(3) Now we come to the third stage, called samyagmithyādṛsti. It is a mixed attitude of right and wrong belief. There is neither a desire to have true beliefs nor a desire to remain in ignorance and false beliefs, like mixing curds and treacle.¹² This is also a transitional stage. getting insight into the right attitude for the first time, it is possible that a man may at the same time begin to feel that what is right may not be right, and he may cling to false ideologies also. This type of mixed attitude has been explained by the Jamas as due to the rise of the semi-pure cluster of the karmic veil deluding the vision. This stage lasts only for an antarmuhūrta, about forty-eight minutes. After that, it may either go up to the higher stage or may fall back to the lower stage of sāsvādana or mithyātva. In this stage, there is no self-control, deśasamyama. One experiences both the right attitude and the perversity at the same time owing to a confusion of attitudes. The persistence of wrong belief makes moral effort difficult. The practice of vows is not possible in this stage because of the perversity which is partially operating. and the practice of vows are possible only from the fifth stage of spiritual development, because the moral effort requires right knowledge and right belief. The Socratic dictum, 'virtue is knowledge', implies a similar assumption that right knowledge will alone give us the possibility of virtue. In this mixed stage, there is no bondage of the particles of ayu karma, the karma which determines the duration of life. There is no death in this stage, because, as Nemicandra says, death must be from the very stage in which the ayu karma is bound.13 Death is not possible also because this stage expresses the vital struggle between the perverse attitude and the right attitude. But in death there is no energy for such struggle, and the man drops either right belief or wrong belief without offering much resistance. This is the stage of active struggle which gives rise to the mixed attitude.

¹² Gommațasăra · Jîvakāņda, 22. 13 Ibid. 25

(4) Next comes the stage of the right attitude. This is the fourth stage. Here, the right attitude is not yet accompanied by moral efforts for the attainment of the good. This is, therefore, called avirate samyagdrsti. One gets a glimpse of the truth, but one lacks the spiritual strengh to strive for the attainment of the truth. In this stage, the soul lacks self-control in spite of the fact that it gets the right attitude and knowledge of the truth. But this belief in the truth is not steady. It is impure and inconstant. It still causes destruction of karma. The right view at this stage may be due to the subsidence of the vision-deluding karma, or it may be due to the subsidence and destruction of the relevant karma.¹⁴ It is also possible that such a stage of right attitude is due to the annihilation of the four primary passions. Thus, the right attitude in this stage may be of three kinds, (i) right belief due to the suppression of the relevant karma, aupasamika samyaktva. It lasts for an antarmuhūrta and then may fall down to the lower stage and lose the right attitude or it may go up to the higher stage. (ii) This higher stage of right attitude is a second form of samvaktva. It is due to the destruction and subsidence of the karmic veil formed by the relevant karma. It lasts for one antarmuhiirta, but, in the language of Jaina theology, it may last for sixtysix sagaras in the case of beings residing in heaven. This stage is called ksayopasama samyaktva. Next in stage is the right attitude which is formed through the destruction of the karmas which are responsible for the perversion of right belief and the excitement of the four passions, 15 This right attitude is clear. There is nothing to cloud it. It is right vision. But in the case of ksayopaśama samvaktva it is vitiated by perversity and is therefore impure and unsteady.

This stage gives us the right attitude, but there is no possibility of moral effort to attain it because it lacks spiritual strength. Moral self-control is not possible. It is called the vowless stage, avirata. In this stage, there is absence of control of the senses and lack of solicitude regarding injury to living beings. However, the person knows the truth and knows that the breaking of vows is wrong. He is filled with compassion and calm. He believes in the right principle and is afraid o the wheel of samsāra, but the moral control and the positive efforts required are not possible. He may not hurt any living being without provocation, but he has not taken any vows in the matter.

But right intuition, right knowledge and self-control are necessary for spiritual development, and the soul which lacks self-control may not rise higher in the state of spiritual development. A soul can rise to the next higher stage only when it can overcome this obstacle of lack of spiritual energy and moral effort.

¹⁴ Gommajasára : Jivakánda, 25.

¹⁵ Ibid. 26.

This stage of self-development belongs to persons who are helpless in the practice of virtue. They have knowledge of the right and good, but they have no power to practise them as they have no control over their senses. Aristotle raised a similar objection against the Socratic doctrine of 'virtue is knowledge', since men act wrongly even knowing what is right. The will in these cases is not strong. Effective virtue would be possible with a strong will and the requisite energy of the soul to translate the will into virtuous action. The soul has to develop self-control gradually for the sake of fuller self-realization. From the next stage onwards there is a gradual expression of self-control.

In the four spiritual stages that are described here, we have to establish the right attitude which requires moral effort for further progress. We may compare these four stages to the state of persons described in Plato's Parable of the Cave. "And now", said Socrates, "let me show a figure how far our nature is enlightened or unenlightened".16 Socrates presents a picture of some human beings living in an underground den from their childhood, with legs and necks chained so that they cannot move. They can only see what is in front of them. The den has a mouth towards the light. Fire is blazing at a distance above them and behind Between the fire and the prisoners, there is a raised way and low wall built along the way like the screen which marionette players have in front of them over which they show their puppets. They would see their own shadows and the shadows of men and animals passing along the prisoners would mistake the shadows for realities.¹⁷ This is the stage of mithyātva, the perversity of attitude towards truth. In this stage we are unable to see the truth because we are bound and chained to perversities through the operation of the deluding karmas.

But if one of them is liberated and is compelled to stand up and walk towards the light, the glare will certainly distress him. He will suffer pain. He would be unable to see the reality and would persist in maintaining the superior truth of the shadows. If he is then taken to the light, he will be in a confused state till he gets accustomed to the sight of the upper world. This may be compared to the stage of sāsvādana samyagdrṣṭi, where there is hesitation and very faint and indistinct glimpses of the truth. But once he gets accustomed to the change, he will be able to see the things of the world. He will gaze upon the light of the moon and the stars and the spangled heavens. The vision may still be indistinct for him. He may not know the meaning of it all. But once he gets the clearer vision of the truth, he will realize the folly of his fellow-prisoners and he will pity them. This is the fourth stage of avirata samvagdrṣṭi. Stupped of all moral flavour, the parable roughly

¹⁶ Plato, The Republic, Book VII 17 Ibid.

represents the four stages of self-realization resulting in the attainment of right vision. It is possible that one who gets the vision may fall down to the lower stage of perversity. But he would still be different from those who have never come out of the den of darkness and perversity. His nature would be filled with the mellowness of the vision. But others in the den would ridicule him and say of him that he went out and came down without his eyes. It was better not to think of ascending. In this parable of the cave, Plato gives a description of people steeped in ignorance and perversity. If any one is given a lift to enable him to rise from this perversity, he may rise for some time but he may fall back again. This parable roughly corresponds to the four stages of gunasthāna mentioned in the Jaina philosophy.

- (5) Next higher among the stages of spiritual development is the stage of right attitude coupled with partial self-control, and is called deśavirata samvagdisti. At this stage, one knows what is right and one tries to practise the right, but one is still vitiated by temptations for untruth and vice. In this stage, we are still controlled by passions, which are an impediment in the struggle for self-realization. There is partial destruction of the karmic matter producing passions.¹⁹ The full pratice of virtues would not be possible, because there is often the possibility of falling off in the snares of passions. Self-control is only partial. This stage is also called viruta avirata, because there is the possibility of both self-control and self-indulgence in the control of vices and the practice of For instance, at this stage one takes a vow not to injure any animal, but is still sinless if one unwittingly kills an animal. However, he may fall off in the practice of such virtues. There is only a partial expression of the energy of self-control. However, in this stage one knows the truth and is devoted to the truth, although one may not be able to practise it fully and consistently.
- stage, moral effort takes a more definite shape, although the efforts are not always successful. The right attitude and the knowledge of the truth gained in the earlier stages have created a general background for the practice of the moral life and the attainment of the good. Moral effort begins to shape itself. In the fifth stage, a person has a glimpse of the truth which is more or less clear and steady, and he tries to develop self-control and to practise virtues for the sake of attaining the truth. But complete self-control has not been possible in this stage, although he acquires some form of moderate self-control. It was only a partial expression of the moral effort. But this lack of full self-control and practice of virtues is overcome in the sixth stage. But even in this stage

¹⁸ Plato: The Republic, Book VII.

¹⁹ Gommațasāra : Jivakānda, 30 and Commentary.

the effort for moral life and the spiritual struggle are not fully successful, because their full expression is vitiated by the moral and the spiritual mertia which comes in the way of a successful practice of the moral life. This inertia is called pramāda. Pramāda is responsible for the failure to realize full control and the full practice of moral life. Therefore, this stage is called pramatta samyata. The pramāda poisons and vitiates moral activities through the operation of the passions which come in the way of perfect conduct. Minor passions operate in this stage. Pramāda causes impurity and partially prevents the perfect observance of vows. 20 Thus, from the fifth stage moral effort has begun to express itself though in an imperfect way. In the sixth stage also, the effort for the moral life continues, although it may not still be successful.

(7) Pramāda, which we have called moral and spiritual inertia, is overcome in the seventh stage. The impediments to the practice of virtues are now gradually being removed. This stage is called apramatta samyata. Now more pronounced self-control is possible. Efforts for the moral life take a more definite shape. One is able to practise the five vows with greater success and without many obstructions. Efforts towards morality are being established. It is possible to get, in this stage, greater self-control and self-confidence. The operation of the karma which prevents the perfect conduct is very feeble and the karmas are being subdued. Similarly, the minor passions called no-kasaya are also at the lowest level of expression. The minor troubles disappear like ripples on water. As a result, prumāda is overcome and one is able to attain the stage where one can practise virtues and vows with greater confidence and greater success. Here, vision of truth is blended with effort for the moral life, to attain truth.21 The aprumatta samyata of this stage is of two kinds, (i) svasthāna apramutta, which is the normal and ordinary stage of practice of virtues, and (ii) satisava apramatta, an extra-ordinary way of practising perfect vows. In the first stage of the practice of vows, pramāda is suppressed. One practises five great vows and possesses twenty-eight virtues. One has right knowledge and a calm disposition. One is absorbed in concentration. From this stage onwards, we may take two ascending scales of spiritual development. For instance, it is possible to go higher in the scale of suppression and the destruction of karmas. This stage is called the ordinary stage of practice of the moral life, because it is not possible to rise higher than this stage. It lasts only for one antarmuhurta, falls down to the sixth stage, and reascends to the seventh again and again. In the higher stage of the effort for the moral life and practice of perfect virtues, it is possible to go higher in the scale of subsidence and destruction of their relevent karmas. The process of

²⁰ Gommatasára ; Jivakánda, 33.

²¹ Ibid. 45.

adhahpravitakarana, by which the soul on a lower level can rise higher and acquire purity, begins to operate in this stage. In this stage of self-development, the journey has taken a definite direction, although it may not proceed with the directness and speed required for the proper and speedy development of the self. However, the efforts for the moral life have taken the right direction and, if pursued, will continue towards the final realization of the self.

- (8) Greater self-control and a more definite progress on the path of self-realization is possible in the eighth stage of development. This is called the stage of apūrva karana. The self attains special purification, and it is capable of reducing the intensity and duration of the karma. It is able to reduce the intensity of the karmas and transform the karmic series. Such a process increases the purity of the soul. The apūrva karana operates in this stage. The souls bring about the subsidence of the karma, which is responsible for the obscuration of the right conduct, after having acquired freedom from the bondage of the karmic matter of sleep and But the karma determining the age, the avu karma, still operates. And those who proceed on the way of the destruction of the karma which obscures right conduct, go the way of destruction of karma called ksapakaśreni. Here also the karma determining the age still exists. Gommatasara gives a detailed analysis of the process of aparva karana operating in this stage. The duration of the stay of the soul in the two scales of subsidence and destruction is different. The soul going the way of subsidence remains, at the most, for an antarmuhurta. But, while going the way of destruction of karmas, it remains for an antarmuhurta as a rule. In this stage one is only affected by mild passions. One experiences extreme delight in overcoming the strain arising out of the suppression and elimination of the passions that one may have in this stage in a mild form. Emotional disturbances do not much affect one. It is possible to develop a stoic attitude of calm and indifference in this stage of self-development, because one has already overcome, with fair confidence, even the milder forms of passion that disturb quiet concentration and contemplation.
- (9) Next is the ninth stage of self-development. It is called anivṛtti-hādara-samparāya. The process of anivṛtti karaṇa operates in this stage. It is possible to have progress in the direction of either suppression or destruction of the karmic matter. But one may be affected by gross passions to some extent. Therefore it is called bādara-samparāya. However, the affliction of the soul by the passions and by the emotional disturbances is still possible, though it is only an occasional possibility and not a frequent occurrence. Very rarely is one afflicted by gross passions and emotions. But it is possible to overcome such emotional disturbances,

²² Gommațasăra : Jivakāṇḍa, 48, 49.

if they occur with greater confidence and ease. In this stage, we have fairly established overselves as spiritual and moral individuals, although sometimes we may be slightly afflicted by passions and grosser impulses.

- (10) In the tenth stage one is free from all passions except the subtle greed of the fourth type. Greed afflicts us. However, distrurbance from the passion of greed is only occasional. Except this, there is no other disturbance One is passionless and undisturbed. As a wellwashed red vest retains the slightest tinge of redness, so the self is affected by the slightest passion of greed. This stage is called sūksma-samparāya.28 Experiencing the slightest touch of greed, the soul can go in the direction of subsidence or of destruction of the karma. Except for such disturbances the soul is passionless and calm. This state approximates to the state of perfect conduct (yathā khyāta). But, one is still affected in the slightest degree by the passion of greed. "This subtle greed can be interpreted as the subconscious attachment to the body even in souls which have achieved great spiritual advancement."24 The soul which has advanced in the direction of subsidence of the karma that obscures right knowledge and right belief and right conduct, can rise to the eleventh stage of spiritual development. In the tenth stage one has advanced fairly well and one has in this stage a well-established and perfect practice of the moral life although sometimes it may be affected by slight disturbances of a passion like greed.
- (11) The eleventh stage is called upasanta moha, where even the slightest possible disturbance due to the passion of greed is overcome and all such disturbances are suppressed. One is free from all types of passions. This is the highest stage, in which the passions and other emotional disturbances that afflict the soul are suppressed. But these passions are not altogether eliminated, they remain suppressed through pressure of the effort for the moral life and one is not altogether free from the enveloping influence of the karmas except the deluding karmas. The stage is, therefore, called chadmastha, as it is just covered by the other karnus, which, however, are not operative in this stage. Like the limpid water in the cold season, when the muddy turbulence of the rains goes to the bottom and leaves the upper surface of a pond clear and transparent, so one who has suppressed all passions and all the deluding karmas is able to remain calm and undisturbed and to control his passions with greater confidence. As all attachments are suppressed, it is also called vitarāga.
- (12) It was seen that we can go either the way of annihilation of karmas or the way of suppression of the karmas. One who goes the way of suppression of the karmas gradually destroys the different types

²³ Gommutasāra - Tīvakāņda, 59

W Tatte (N): St. bes in Juona Philosophy p. 278,

of deluding karmas, and the soul goes from the tenth stage of upaśānta kaṣāya to the twelfth stage, in which the passions are altogether destroyed. The twelfth stage is called kṣīṇa moha, or kṣīṇa kaṣāya. This is the highest stage of annihilation of the karmas, while in the eleventh stage we reach the highest stage of suppression of the karmas. This is upaśānta moha. The soul remains in this stage for one antarmuhūrta. During this time, it is very much purified and destroys the karmas obscuring jñāna and darśana and also the deluding karmas. The soul is now free from all the four types of ghāti karmas. All the passions disappear altogether.

(13) When all the passions and the four types of ghāti karmas are destroyed, one reaches the thirteenth stage of spiritual development. In this stage, one is nearer the absolute perfection only with some impediments in the way. This stage is called sayoga kevali. conditions of bondage like mithvätva, pramäda, and passions are no longer operative. One is free from such bondage. However, the other condition, viz., the bondage of activity, still remains. It is not free from empirical activity and intrest. It is not free from yoga; therefore, it is called savoga; but it has attained omniscience in the form of perfect knowledge and perfect intuition. The soul has become kevali. fore, this stage is called savoga kevali. But one is still not free from embodied existence, because the four types of non-obscuring kurmas, like the vedantya which produces feeling, ayu which determines the span of life, nama which determines the physical structure and nature of the body, and gona which determines one's individual status in life, are still operative. One is not free from bodily existence, because the avu karma is still to be exhausted. Persons still go through the threefold activities of body, speech and mind. But there is no influx of the karma. this stage, we find omniscient beings like the tīrthuikaras, the ganadharas They attain the enlightenment, but still live in and the samanya kevalins. this world, preaching the truth that they have seen.

This stage can be compared to the stage of *jīvanmukti* described by the other orthodox systems of Indian thought. Vedānta recognizes the state of *jīvanmukti*. Vedāntasāra describes this as the stage of the enlightened and liberated man yet alive. He is in the perfect state of deliverance. He may appear to be active in this world in many ways; yet at root, he is inactive. He is like the man assisting a magician in a magical show, knowing that all that is shown is merely an illusion of the senses. He is unaffected by all that happens. Yet, the prārabdha karma of the individual destiny, which is responsible for what is, cannot be destroyed even at this stage. It has to exhaust itself, as these karmas produce their effects of continued life. But not being replenished, they will

²⁵ Vedăntasăra, 219.

die away. When Gautama, the Buddha, attained enlightenment, he wanted his enlightenment not to be known to others. But Brahmā descended to the earth and inspired the Buddha to be the teacher of mankind, the teacher of the beings of this world and heaven. This stage is the stage of jīvanmūkti. And this is the stage of sayoga kevali of the tīrthankaras, gaṇadharas and sāmānya kevalins when they preached their sublime knowledge to the people of this world. Zimmer compares this attitude of the kevalins to the function of the lamp. Just as the lamp that lights the room remains unconcerned with what is going on in it, so the self enacts the rôle of 'lighting the phenomenal expersonality solely for the maintenance of the body, not for the pursuit of any good, any gratification of the sense or any kindly goal.²⁶

(14) The final stage of self-realization is the stage of absolute perfection. It is the stage of absolute liberation without any empirical activity attached to it. This stage is called ayoga kevali. Here, all the remaining karmas are also destroyed. Before entering into the final stage of absolute purity and liberation, the soul appears to prepare its way for the stoppage of all activity both gross and subtle. This stoppage of activity requires another activity as an instrument. The soul stops the gross activity of the sense organs and the activity of speech, mind and body. Then it stops the subtle activity of the mind, speech and body, like the physiological processes of respiration and digestion. Then the soul enters into the third stage of sukla-dhyāna, which is infallible and leads to the final liberation directly and immediately. At this level of sukla-dhvāna, even the subtle physiological activities and the subtle activities of the mind and body are stopped. The self becomes as motionless as a rock, being devoid of all bodily speech and mental activity. This is the highest stage of sukla-dhyāna.27 With the remaining karmas climinated, the highest perfection is reached. Hence this is called ayoga kevali. The self has attained peaceful perfection. The influx of karma is completely stopped and the self is freed from all karmic dust.2x This state lasts only for a period of time required to pronounce five short syllables. At the end of this period the soul attains disembodied liberation. This state of avoga kevali is also described as the state of Parabrahma or Nivanjana.

Of the fourteen stages of self-development thus described, it is said that the gods and those who dwell in hell can attain the first four of the guṇasthānas. They can get the vision of Truth. They can know what is right. But they cannot make the moral effort required for attaining the truth. The lower animals in this world can rise to the fifth stage of deśavirata. Moral effort is possible to some extent. We get an account

²⁶ Zimmer (II.): Philosophics of India, Ed. by Campbell, p.446

²⁷ Dhyanaéataka 82.

²⁸ Gommajasāra: Tīvakāņda.

of the spiritual struggle of the *tirthaikaras* through the various forms of existence, in the forms of lower animals and gods, till they reached perfection. But the final liberation is only possible in the human existence. It is possible only for human beings to go through the fourteen stages of spiritual development and reach the highest state of perfection called *kaivalya* state.²⁹

Radhakrishanan says that it is not possible to give a positive description of the liberated soul. The state of perfection is passively described as freedom from action and desires, as a stage of utter and absolute quiescence.⁸⁰ It is a state of unaffected peace, since the energy of past karma is extinguished. In this state, the soul is 'itself' and no other. It is the perfect liberation. Zimmer says that, after its pilgrimage of innumerable existences in the various inferior stratifications, the life-monad rises to the cranial zone of the microcosmic being, purged of the weight of the subtle karmic particles that formerly held it down. Nothing can happen to it any more; for it has put aside the traits of ignorance, those heavy veils of individuality that are the precipitating causes of biographical events. In the highest stage of perfection, the individuality, the masks, the formal personal features are distilled away. "Sterilized of colouring, flavour and weight, the sublime crystals now are absolutely pure—like the drops of rain that descend from a clear sky, tasteless and emasculate."31

This is an account of the journey that a person has to make to attain perfection. These stages of the struggle for self-development are psychologically significant. It is not possible, here, to give parallels in psychological terms. Empirical psychology is concerned with the analysis of the nature and development of the empirical personality. Bahirātman can be compared to the 'me' of William James. Similarly, it is also possible to give a description of the antaratman in terms of the 'I' of William James to some extent. Rational psychologists have shown the possibility of such a study. But psychology is not aware of the nature of the transcendental self, the parmatman, and the nature of the development of the empirical self through various stages to reach the highest stage of the transcendental self. Such a language is foreign to psychology as a science. But, considered from the point of view of gunasthānas, the soul is in the empirical stage, the 'me', before it cuts the karma granthi and experiences the first dawn of the vision of the truth in the fourth stage. After it gets the vision, it makes moral efforts to attain the truth in the highest perfection. From the fifth stage onwards to the stage of chandamastha moral efforts are prominent. The self in these

²⁹ Abhalhanarajendra, Vol. III. Gunasthana (5).

³⁰ Radhakrishnan (8): Indian Philosophy, Vol. I, p. 333.

³¹ Zimmer (H.); Philosophise of India, Ed. by Campbell, p. 260.

stages may be called antarātman, or the spiritual self, or of the 'I' of William James. On the attainment of omniscience, the soul struggles to free itself from the bond of wordly life. This is the struggle to reach the highest perfection. The self in the highest stage of perfection is in the fourteenth stage of ayoga kevali, which is the consummation of self-realization. This is the transcendental self, a metaphysical concept of the self. One has to cross the stage of empirical self and also of inner self in order to reach the highest stage of transcendental self or paramātman.

Prof S. C. Nandimath compares the gunasthanas to the sat-The sthala and sthana are synonymous. The sthalas of Vīrašaivism gunasthanas of Jamism have the same significance as the sat-sthalas. Vīrakaivism has six stages, while Jainism presents fourteen stages through which the soul has to pass before it reaches perfection. However, the underlying principle in both seems to be the same 32. According to Vīraśaiva thought, the soul possesses ignorance because of veil of avidyā. It identifies the self with the things of the world. But sometimes, miraculously, there dawns an idea that the things of the world are not This idea increases one's faith in the supreme power. starting point. The first stages viz., bhakti-sthala, maheswara-sthala and pradesa-sthala are stages in self-development wherein the distinction between the self and the absolute 'tiswara' is still present. But later stages, like pranalniga-sthala, and sarana-sthala or the stage of selfsurrender and aikyu sthala leading to the final unity, gradually eliminate the distinction between jīva and īśvara, finally to the fusion of jīva with the transcendental self. Prof. K. G. Kundanagar, in his introduction to the Adi-Purana, also says that the Jama gunsthanus may be compared to the sat-sthulus of Virasaivism It would be difficult to accept the interpretation given by S. C. Nandimath and K. G. Kundanagar because there appears to be difference in the Jama and Vīraśaiva attitudes towards the problem. The sat-sthalas show the way towards the union with the God in the aikya sthala. For the Jainas there is no absorption with the Infinite even in the highest stage of self-realization. The Jamas are pluralists. They do not admit a reality beyond the individual selves. In Vīrasaivism bhakti is an important factor for the realization of the self, which culminates in the union with God. It is through bhakti that the individual journeys through the stages of purification, self-surrender and the final stage of union. For the Jamas, bhakti has no place in the struggle for the realization of the self. The right attitude, (samyaktva), is to be coupled with the moral efforts in the way of self-realization. It is only the individual self-confidence, the Jainas say, that leads one on to the progress towards perfection. In my discussions with some

³² Nandimath (S C): A Hand Book of Virubornism, Ch. XI. The Pilgrims' Progress.

scholars of Vīraśaivism, I have come to realize the differences between the attitude of the two schools of thought. However, this problem needs greater consideration. It is not possible to discuss this problem in detail in the frame-work of this study.

It is not possible to get a thorough understanding of these stages of development by instruction through books. It is necessary to be absorbed in the tradition of the religion for a better understanding of the problem. For instance, it is easier for a Jama to understand the significance of gunasthānas than for a non-Jama. Similarly, it is easier for a Vīraśaiva than for others to understand śat-sthalas, 38

This is an account of the fourteen stages, or gunasthūnus, of the spiritual development. The stages of spiritual development are psychologically significant, although empirical psychology will not be able to explain the significance of these stages. We should realize that 'man is not complete; he is yet to be'. In what he is, he is small. He is occupied every moment with what he can get. But he is hungering for something which is more than what he can get. Tagore writes, "In the midst of our home and our work, the prayer rises 'Lead me across!' For here rolls the sea, and even here lies the other shore waiting to be reached.....'34

³³ Adi Purâna, Ed. by Kundanagar (K. G.) and Rao Bahadur Chougule. (Kannada). Introduction

³⁴ Tagore (R.): Sädhanä, The Realization of the Infinite.

CHAPTER IX

CONCLUSION

The purpose of this treatise has been to present some problems of Jaina psychology. But no attempt has been made herein to build up a science of Jaina psychology; for, a positive science of psychology, in the sense in which the term is used to-day, was not possible at that early stage of knowledge. Psychological analyses were merely shades of the epistemological problem, and both, in turn, were parts of metaphysical investigation. However, the psychological theories and problems have been woven together here to present a coherent picture as far as possible.

The Idea of the Soul

The idea of the soul has been a fundamental principle in the rational psychology of the Jainas. The existence of the soul is a presupposition in Jaina philosophy. It is a pratyakṣa. The soul is described from the noumenal and the phenomenal points of view. From the noumenal point of view, it is pure consciousness. Upayoga is the fundamental characteristic of the soul. Upayoga is interpreted, in this treatise, as horme in the sense in which McDougall used the term. It is the purposive force which is the source of all experience. All the three aspects of experience—the cognitive, the conative and the affective—spring from it.

Cetanā is a fundamental quality of the soul. It is pure consciousness, a kind of flame without smoke. This consciousness is eternal, although it gets manifested in the course of the evolutionary process of life in the empirical sense. The empirical experience arises out of the contact of the sense organs with the object.

Thus, upayoga is a driving force which is purposive and which is responsible for experience. It expresses itself into jħāna and darśana. This expression is possible in the light of cetanā. Cetanā is the background of the light of cognitions—of jħāna and darśana.

The Jainas recognize three species of conscious experience—the cognitive, the conative and the affective. They make a distinction in consciousness as knowing, feeling and experiencing the fruits of karma. As a rule, we have first feeling, then conation and then knowledge. McDougall's view of the primacy of the affective element in experience and especially in instinctive behaviour may be mentioned in this connection.

The Jaina thinkers were not unaware of the unconscious. The Nandisitra gives a picture of the unconscious in the mallaka dṛṣṭānta. The doctrine of karma as analysed by the Jainas comes nearer to Jung's

'Collective Unconscious'. He says that it is possible to find the karmic factor in the archetypes of the unconscious.²

Prajhāpanasūtra recognizes the peculiar mental force called pāsanaya, which is rendered as paśyatta.⁸ It connotes prolonged vision. It is interpreted, in this treatise, as mneme, a psychic force which holds our experience and which later becomes the basis for new experiences.

The Jaina Theory of Mind

The Jainas have developed a systematic theory of mind. Their approach to the problem has been a fusion of the synthetic and the analytic points of view. The Jainas say that mind is a quasi-sense organ, a no-indriya. Mind has two phases: the material phase, dravya manas, and the psychic, bhāva manas. The material phase is a mental structure and is composed of infinite, fine, coherent befitting particles of matter meant for the mental function, manovarganās.

Bhāva manas is expressed in mental processes like thinking. C. D. Broad, in his Mind and its Place in Nature, presents a similar view in the distinction of the bodily and psychic factors of the mind. McDougall also makes a distinction between the facts of mental activity and the facts of mental structure. He infers the structure of the mind from its functions.

Regarding the problem of the relation between body and mind, the Jainas presented a sort of psycho-physical parallelism concerning the individual minds and bodies. Yet, they were aware of the interaction between the mental and the bodily. The empirical approach showed them that there is mutual influence between them. The Jaina theory was an attempt at the integration of the metaphysical dualism of jīva and ajīva and the fact of interaction of individual minds and bodies.

The Sense Organs and Sense Qualities

The Jaina philosophers recognized two varieties of experience: sensory and extra-sensory. Sensory experience is indirect, it is conditioned by the sense organs and the mind, while extra-sensory experience is directly apprehended by the self without the help of the sense organs and the mind. For the sensory experience, the sense organs are the windows through which the self cognizes the external world. The mind does the function of organizing the impressions received through the sense organs in order to get a coherent experience.

The Jainas have accepted five sense organs. Motor organs are not recognized as instruments of experience. The Jaina analysis of the

² Jung (C. C.): Two Becays in Analytical Psychology, (1953), p. 76. foot note.

¹ Prajhapamasútra, 29-30.

physical structure (dravendriya), and the psychic function (bhāvendriya), has great psychological significance. The physical part is the organ itself. It has its subdivisions. It can be compared to the modern physiological analysis of the sense organs. The bhāvendriva is divided into two parts: labdhi and upayoga. Labdhi is the manifestation of specific sense experience, and upayoga is the psychic force, the horme, which determines the specific experience

The problem of the contact of the sense organs with the external object is psychologically important, although it has a great epistemological bearing. The Jamas maintain that the visual organ, like the mind, is aprāpiakāri, because it does not come into direct physical contact with the object. The other four sense organs have direct physical contact with the object. Therefore they are prāpiakāri. But modern scientific analysis of the sense organ of sight shows that we should suppose that there is some form of contact of the eye with the object through the medium of light.

The Jama analysis of the sense qualities coming from the various sense organs has also great psychological importance. According to the Jamas, the visual sense quality is classed into five types of colour. Touch is of eight types, and smell is of two. There are five types of taste. There are seven fundamental sounds. Comparison with the modern analysis of sense qualities shows that the Jama analysis has a psychological basis although not based on experimental investigation.

Thus, the soul is the experiencing agent. It gets two types of experience—the sensory experience and the extra-sensory experience. The sensory experience is empirical experience gained through the sense organs and the mind. It is indirect. The extra-sensory experience is supernormal experience. The soul gets it directly without the help of the sense organs and the mind.

Sense Perception

The Jaina analysis of sense perception is as complex and it is significant. The contact of the sense organs with the object, except in the case of the visual sense, is just a remote condition like time and space. The sense perception of a particular object does, in fact, involve psychic factors. The removal of psychic impediments in the destruction and subsidence of the knowledge-obscuring karmas is a necessary factor in the sense perception of an object. It is a negative condition. Selective attention is a positive psychic factor. It may be compared to the mental set of the western psychologists.

The Jaina description of the stages of sense perception is a significant contribution to the psychology of perception, although it gives a predominantly epistemological picture According to the Jainas, sense

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perception can be analysed into four stages: (1) avagraha, the stage of sensation; (ii) $ih\bar{a}$, the stage of associative integration; (iii) $av\bar{a}ya$, perceptual judgment; and (iv) dharanā, retention. Avagraha is a sensational stage. It is further divided into $vya\bar{n}jan\bar{a}vagraha$, which may be rendered as the stimulus condition of the sense awareness, or the threshold of awareness; and arthāvagraha, awareness, or the sensation itself. Ihā involves the mental factor. It integrates the sense expressions. Avāya is clear cognition of the object involving perceptual judgment. Dharanā is retention of what has been experienced. However, sense perception is a concrete psychosis involving these processes which are combined and fused to give a coherent experience. The Jaina description of sense perception gives a scientific and coherent picture of the psychological element in perception. This can be compared, to some extent, to the structuralist view of sense perception.

Other Sources of Sense Experience

There are other sources of getting sense experience. They are: (1) dhāranā retention, which is also a condition of recollection, (ii) smitt, recollection, (iii) pratyabhijñā, recognition, which gives determinateness to sense experience, and (iv) anumana, inference, which is an indirect source of sense experience. Dharana can be described as a mental trace or mental disposition (samskāra) by which experiences cognized in a definite form by avava are retained. Such retention forms a condition of recall of the experience on a future occasion. Sinrti is a form in which memory expresses itself. It is ideal revival of a past experience so far as it is It arises from the stimulation of the mental merely reproductive. disposition (vāsanā), which may be considered as equivalent to the sainskāra of the Jainas. Mental dispositions are the latent conditions of memory. The emergence of mental dispositions to the level of consciousness is due to (i) the external conditions consisting of the environmental factors, and (ii) internal conditions connected with the conative urge. The Jaina description of the conditions of memory may be compared to the laws of association in psychology. Regarding the internal conditions, the Jaina description comes nearest to McDougall's view of memory. McDougall says that explicit volition, purpose or intention to remember greatly In order to get clear recollection, favours remembering and recollecting. it is necessary to remove psychic impediments like aversion to the object, fear and other painful experiences associated with it. Such a removal of psychic impediments was, in a sense, mentioned by the Jainas in terms of the removal of the veil of karma. But recollection does not give us a complete picture of memory unless recognition (pratyabhijñā), as a factor operates. The Jainas give prominence to pratyabhijñā as an important factor in experience. It is a synthetic judgment born of perception and

recollection. The Jainas make *upamāna* a form of recognition. Psychological analysis of recognition shows that recognition is a fusion of a percept and an image.

Anumāna (inference), is another source of knowledge. Inference has been recognized by all systems of Indian thought except the Cārvaka, as a source of knowledge. The Jaina analysis of inference has great psychological value, although it is mainly epistemological. The distinction between inference for oneself (svārtha) and inference for others (parārtha), is very important. Inference for others needs a syllogistic structure for expression. On this basis, Bhadrabāhu contends that the extent of the constituent propositions depends on the ability of the person to whom it is addressed.

Inference is a mental process. Validity of inference depends on psychological and logical grounds. It is based on the perception of the relation of the minor term to the middle term, and the recollection of the universal relation between the major and the middle term. McDougall showed that all deductive reasoning involves 'aperceptive' synthesis. Similarly, the desire to know is an important condition of inference. Miss Stebbing said that inference involves both the constitutive and the epistemic conditions. The epistemic condition relates to what the thinker, who is inferring, knows. 5

Supernormal Perception

The Jainas thought that knowledge due to the sense organs and the mind is not sufficient to comprehend the nature of reality. They accepted the possibility of immediate and direct experience without the use of the sense organs and the mind. This is pratyakṣa. This is supernormal experience. All schools of Indian Philosophy, except the Cārvākas, accept the possibility of such supernormal experience.

The Jainas give three levels of supernormal perception: (i) avadhi, (ii) manahparyāya, and (iii) kevala. Avadhi may be compared to clairvoyance. It differs with different individuals according to their capacities. Human beings acquire this form of experience. But it is natural with beings living in heaven and hell. The Jainas have described different varieties of avadhi.

Researches in extra-sensory perception show that clairvoyant cognition may differ with different individuals regarding intensity and durability of experience. The Society for Psychical Research has found many instances of this type. The psychic phenomenon called 'French Sensitiveness', which is sometimes called 'psychometry', may be regarded

⁴ McDougall (W.). An Outlines of Psychology, p. 402.

⁵ Stebbing (8.): Modern Introduction to Logic, p. 215.

as a form of avadhi, although in psychometry the sense organs and the mind do play their part.

Manahparyāya is cognition of the mental states of others. A certain physical and mental discipline is necessary for acquiring this experience. It is only possible for human beings of character, especially for homeless ascetics. The conditions for the possession of manahparyāya are that (i) the human being must have fully developed sense-organs and a fully developed personality; (ii) he must possess the right attitude; and (iii) he must be self-controlled and possess extra-ordinary power. Siddhasena Divākara is inclined to extend the scope of manahparyāya to lower animals possessing two or more sense organs. In this connection we may mention Dr. Rhine's view that it is possible to find instances of the possibility of such perception in the case of lower animals, especially the vertebrates. But the traditional Jaina view does not accept such a possibility. Two varieties of manahparyāya—rjumati and vipulamati—have been recognized. Manahparyāya may be compared to telepathy.

The Jaina analysis of avadhi and manahparyāya shows that avadhi may be called paranormal while manahparyāya supernormal cognition. Avadhi is possible even for lower animals and beings residing in hell, while man has to acquire it. But only gifted human beings possess manahparyāya. Even the gods residing in heaven may not possess it.

In the West, interest in extra-sensory perception is increasing. It is being investigated on an experimental basis since the establishment of the Society for Psychical Research. The Duke University is foremost in this respect. Psychologists like McDougall have said that extra-sensory perception like clairvoyance and telepathy seems also in a fair way established. Dr. Rhine has done good work in extra-sensory perception. Prof. Myers cites many instances of telepathic intuition.

Kevala is the highest form of experience. It is omniscience. It is pure consciousness. It intuits all substances and modes. Nothing remains to be known in omniscience. The Jaina view of omniscience may be compared to the Nyāya view of divine knowledge and the Yoga theory of divine perception, although the Jaina emphasis is on the individual soul.

It is difficult to establish the possibility of omniscience on the basis of empirical methods of investigation which psychology and the empirical sciences follow. However, its logical possibility cannot be denied.

The Journey of the Soul

The Jainas believe that the soul has an inherent capacity for self-realization. The realization of the self is a realization of the transcendental self and not of the empirical self. The soul has the tendency to free itself from the wheel of sainsāra, but this tendency is obscured by the

veil of karma. The attainment of samyaktva, right attitude, is a condition

of finding the way to self-realization.

In its wanderings in the wheel of samsāra, the soul sometimes gets the vision of the goal of liberation as also of the way to reach this goal. It feels an impulse to make efforts to reach this goal. This energy for effort is yathāpravṛtta karaṇa. It is then set on the way to liberation. The struggle consists in the twofold process known as apūrva karaṇa and anivṛtti karaṇa. The process of apūrva karaṇa enables the soul to cross the obstacles of karma granthi while anivṛtti karaṇa leads it to the dawn of enlightenment.

The way to self-realization is long and arduous. It takes many difficult stages before perfection is reached. The Jainas have mentioned fourteen stages in the struggle for perfection. They are called gunasthanas. The first four stages lead to the right vision (samyaktva), by removing the It is purely an intellectual obscuration created by perversity of attitude. process. It does not involve moral effort for self-realization. These four stages may be compared to the progressive development of the attitude of the prisoner in 'the parable of the cave' in Plato's Republic. In the struggle for attainment of perfection, the soul undergoes the vicissitudes of moral life, sometimes going up the stage of moral development and sometimes coming down. This moral struggle starts with the fifth stage. The fourteenth gunasthana is the final stage of self-development. It is called the state of ayoga kevali. Thirteenth stage is the Kaivalya stage, and this is the final stage and it represents its last phase in life for a few moments only.

Dr. Nandimath compares the guṇasthānas to the sat-sthalas of Vīraśaivism. Prof. Kundanagar in his introduction to \bar{A} dipurāṇa, gives a similar view. The struggle for perfection in the fourteen stages of self-development has great psychological importance, although psychology as a positive science will not be able to explain the significance of these stages.

A study of the problems of psychology as presented by the Jainas is useful for a better understanding of the Jaina philosophy. These problems have been interpreted in terms of the concepts of western psychology, especially the rational psychology. An analysis of these problems in the light at once of ancient Indian thought and Western psychological thought gives a synoptic view of the nature and value of the problems that the Jainas presented.

BIBLIOGRAPHY

ENGLISH WORKS

- Adrian E.D., The Basis of Sensation, Christophers, London, 1934.
- Aristotle, (1) De Anima, Trans: R. D. Hicks, Cambridge University Press, London, 1907. (2) Psychology—A Treatise on Principles of life, Trans: W. A. Hammond, Swan Sonnen Schein & Co. Ltd., London, 1902.
- B. C. Law Volume, Part II—Nyāya Vaišeşika Concept of Mind—Article by Bhaduri, Bhandarkar Oriental Research Institute, Poona 1946.
- Bain Alexander, The Senses and the Intellect, 4th Ed., London, 1894.
- Bosanquet Bernard, Logic on the Morphology of Knowledge, Vols. I & II. 2nd Ed., Oxford University Press, London, 1911.
- Bradley F.H., The Principles of Logic, Vols I & II. 2nd Ed. Oxford University Press, London, 1922.
- Broad C.D., (1) The Mind and its Place in Nature, Kegan Paul, Trench Trubner & Co. Ltd., London, 1937. (2) Religion, Philosophy and Psychical Research, Selected Essays, Routledge and Kegan Paul Ltd., London, 1951.
- Chatterjee S. C., The Nyāya Theory of Knowledge, University of Calcutta, 1939.
- Das Gupta, History of Indian Philosophy, Vol. I., Cambridge University Press, London, 1951.
- Descartes C.J., Meditations, Trans. Kemp Smith, Macmillan & Co., London, 1952.
- Fechner G. T., Elements of Psycho-Physics, Trans. from the German by H. S. Langfeld, Aufl. 1889.
- Flew Antony, A New Approach to Psychical Research, Watts and Co., 1953.
- Freud Sigmund, Psycho-Pathology of Everyday Life. Authorised English Edition with Introduction, by A. A. Britt, Comet Books, 1958.
- Geldard F. A., The Human Senses, New York, John Wiley & Sons, 1953.
- Glasenapp Jr. Von, The Doctrine of Karma in Jaina Philosophy, Published by the Trustees of Bai Vijibai Charity Fund, Banaras, 1942.
- Hering E. Wald, Theory of Light Sensation, Trans. from German by E. Rand, 1928.
- Hiriyanna M., Outlines of Indian Philosophy, George Allen & Unwin Ltd., London, 1932.
- Hume David, A Treatise on Human Nature. Edition with Preliminary dissertation and notes by T. H. Green and T. H. Grose, Vols. 1-2. London, 1874.
- Hunter I. M. C., Memory—Facts and Fallacies, Pelican Psychology Series, Penguin Books, 1957.
- Jacobi H., Studies in Jainism, Ed. Jinavijaya Muni., Jaina Sahitya Samsodhaka Karyalaya, Ahmedabad, 1946.
- Jaini J. L., Outlines of Jainism, Cambridge, 1916.

James William, (1) Psychology, Henry Holt & Co., New York, 1892. (2)
Principles of Psychology, Vols. I & II. Macmillan & Co., London, 1951.
The Journal of Philosophy, Vol. I, No. 1, 1958.

Johnson W. M., Logic-Parts I & II, Cambridge University Press, London, 1922.
Jung C. G., (1) Two Essays on Analytical Psychology, Tr, from the German by R.F.S. Hull, Routledge and Kegan Paul, London, 1953. (2) Introduction to a Science of Mythology. Tr. R. F. C. Hull, Routledge and Kegan Paul, London, 1956.

Jwala Prasad, Indian Epistemology, Motilal Banarasidass, Lahore, 1939.

Keith B., Indian Logic and Atomism, Clarendon Press, Oxford, 1921.

Kuppuswamy, Hiriyanna Commemoration Vol. Nature of Mind in Indian Philosophy.

Langley and Cheraskin, The Physiology of Man, McGraw-Hill, New York, 1954.

Locke John, An Essay Concerning Human Understanding. Ed. by A. C. Fraser Vols. 1-2. Oxford, 1894.

Luckasiewicz Jan., Aristotle's Syllogistic. Clarendon Press, Oxford, 1951.

McDougall William, (1) An Outline of Psychology 12 Ed., Methuen & Co. Ltd., London, 1948. (2) Body and Mind, Methuen & Co. Ltd., London, 1911.

(3) Physiological Psychology, Methuen & Co. Ltd., London, 1908.

(4) Riddle of Life, 2nd Ed., Methuen & Co. Ltd., London, 1939.

Miller J. C., Unconsciousness, John Wiley & Sons, New York, 1942.
Mind, April, 1930. Monist, Vol. XXXXI, 1936.

Morris C. W., Six Theories of Mind, University of Chicago Press, Chicago, 1932.
Murphy G., An Historical Introduction to Modern Psychology, 3rd Ed., Kegan Paul, London, 1932.

Naidu P. S., The Hormic Theory, Central Book Depot, Allahabad, 1947.

Nandimath S. C., Hand book of Vīrašavism, Literary Committee, Lingayat Education Association, Dharwar, 1941.

Nunn P. T., Education: Its Data and First Principles.

Plato, The Dialogues of Plato Trans: by B. Jowett, (1) The Meno. (2) The Phaedo, (3) The Republic, Trans: by Cornford F. M. Clarendron Press, Oxford 1951.

Price H. H., Perception, Methuen and Co., Ltd., London, 1950.

Pringle-Pattison, The Idea of God, Oxford University Press, London, 1917, Proceedings of Aristotelian Society, 1926.

Radhakrishnan S., Indian Philosophy, Vols. 1-2, George Allen and Unwin Ltd., London, 1941.

Ranade R. D., Constructive Survey of Upanisadic Philosophy, Oriental Book Agency Poona, 1926.

Rand B., The Classical Psychologists, Houghton Mifflin Company, 1912.

Rhine J. B., New Frontiers of the Mind, Pelican Books, 1950.

- Rhys Davids, (Mrs). (1) The Birth of Indian Psychology and its Development in Buddhism, Luzac & Co., London, 1936. (2) Buddhist Psychology, 2nd Ed., Luzac & Co., London 1924.
- Rogers A. K., A Student's History of Philosophy, Macmillan & Company London, 1926.
- Ross James, Groundwork of Educational Psychology, (New Edition), George G. Harrap & Co. Ltd., London, 1951.
- Russell Bertrand, (1) Problems of Philosophy. New and Revised edition, Williams and Norgate, 1919. (2) The Principles of Mathematics. (Second edition), George Allen & Unwin Ltd., London, 1951.
- Saksena S. K., Nature of Consciousness in Hindu Philosophy, Nand Kishore & Bros., Banaras, 1944.
- Seal B., Positive Science of the Ancient Hindus, Longmans Green & Co., London, 1915.
- Sinha J., Indian Psychology: Perception, Kegan Paul Trench, Trubner & Co., Ltd., London, 1934.
- Spearman C., Psychology Down the Ages. Vols. 1-2. Macmillan, London, 1937. Spencer, Herbert, The Principles of Psychology, 5th Edition, London, 1890.
- Stebbing L. S., A Modern Introduction to Logic, 6th Ed., Methuen & Co. Ltd., London, 1948.
- Stevenson Sinclair, (Mrs.) The Heart of Jainism, Oxford University Press, 1915.
- Stout G. F., Manual of Psychology, Revised in collaboration with the author by C. A. Mace, 4th Ed., Univ. Tutorial Press, London, 1929.
- Tagore Rabindranath, Sādhanā, Macmillan, London, 1947.
- Tatia Nathmal, Studies in Jaina Philosophy, Jain Cultural Research Society, Banaras, 1951.
- Tyrrell G.N.M., The Personality of Man, Pelican Books, 1946.
- Vinacke L. E., The Psychology of Thinking, New York, McGraw-Hill, 1952.
- Ward James, Psychological Principles, 1952.
- Washburn Margaret, The Animal Mind—The Animal Behavior Series, 4th Edition, Macmillan Co., New York, 1936.
- Weber, De Tactu, A Monograph, Translation in E. B. Titchener's Experimental Psychology, 1934.
- Woodworth R. S. and Marquis, Psychology, 5th Edition, Henry Holt and Co., New York, 1947.
- Wundt Wilhelm, Principles of Physiological Psychology. Trans: by E. B. Titchner, Macmillan & Co., New York, 1904.
- Zimmer H., Philosophies of India Ed. Campbell, Routledge and Kegan Paul, London, 1951.

NON-ENGLISH WORKS

Abhidhāna Rājendra, Ed. Muni Rājendra Sūri., Jaina Śvetāmbara Samastha Samgraha. (Vira Samvat, 2440.)

Anuyogadvāra Sūtra, with by Maladhāri AS 1924.

Ācārānga Sūtra, Trans. by H. Jacobi, S.B.E., Vol. XXII.

Aptamimāmsā (of Samantabhadra with Astasati and Astasahasri. NSP 1915) Āvasyaka Sūtra (with Niryukti by Bhadrabāhu and Vrtti, by Malayagiri, AS 1928.)

Astasahasri (as in Āptamīmāmsā).

Aitareya Upanisad.

Bhagavadgitā.

Bhagavatī Sūtra, Abhayadeva AS 1919.

Brhadāranyaka Upanişad.

Brahmasūtra

Chāndoyga Upaniṣad.

Dhyānaśataka by Jinabhadra with Haribhadra's commentary. (Shri Vinaya-bhaktisundaracaraṇa Granthamālā, No. 3, Jamnagar).

Digha Nikāya (PTS).

Dravyasamgraha by Nemicandra Siddhāntacakravarti with the Vrtti of Brahmadeva. Ed. by S. C. Ghoshal (The Sacred Books of the Jainas, Vol. 1, Arrah 1917.)

Daśavaikālika Sūtra (with Niryukti).

Isa Upanisad.

Jūāna-bindu-prakarana (of Upādhyāya Yasovijaya, Singhi Jain Series, No. 16.) Jaina-tarka-bhāṣā (of Upādhyāya Yasovijaya, Singhi Jaina Series No. 8.)

Katha Upanisad.

Karmagrantha, I to IV (of Devendrasūri. Ātmānanda Jaina Granthamālā, No. 85.)

Karmaprakrti with cūrni and the commentaries of Malayagiri and Upādhyāya Yasovijaya, (1937.)

Kena Upanisad.

Labdhisāra by Nemicandra Siddhāntacakravarti. (Rāyacandra Jaina Šastramāla, No. 8 NPS, 1916.)

Laghlyastraya, (Singhi Jain Series, No 12.)

Majjhima Nikāya (PTS edition.)

Mundaka Upanisad.

Nyāya-Sūtra.

Nyāyasūtra-Bhāṣya of Vātsyāyana.

Nyāyasūtra-Bhāṣya-Vārttika of Uddyotakara.

Nyayamanjari of Jayanta (KSS No. 106, 1936.)

Nandi-Sütra (Candana Jaināgama Granthamālā, No. 2.)

Niyamasāra, by Kundakundācārya (The Sacred Books of the Jainas, Vol. IX, Lucknow, 1931).

Pañoāstikāyasāra, by Kundakundācārya (The Sacred Books of the Jainas, Vol. III, Arrah, 1920).

Paramātma-prakāša and Yogasāra of Yogindudeva (Šri Rāyacandra Jaina Sāstramālā, No. 10, 1937, Ed. A. N. Upadhye).

Praśastapāda-Bhāṣya (with Vyomatī and other commentaries. Chowkhamba Sanakrit Series, 1930).

Praśatapāda-Bhāṣya with Kandali (Śrīdhara Bhaṭṭa, Ed. Pt. Vindhyeśvarīprasāda, Kāshi, 1951.)

Prameyakamalamärtanda of Prabhäcandra, (NSP. 1941).

Pramāṇa-mīmāmsā of Ācārya Hemacandra (Singhi Jaina Series).

Prajñāpanā Sūtra.

Şatkhandagama with Dhavala commentary. Amraoti, 1939.

Sāmkhya-kārikā of Iśvarakṛṣṇa.

Samyutta-Nikāya (PTS).

Sāmkhya-pravacana-bhāṣya of Vijñānabhikṣu.

Sarvārthasiddhi of Pūjyapāda Devanandi, a commentary on Tattvārthā-dhigama Sūtra.

Sthānānga Sūtra (Ahmedabad, 1937).

Sütrakṛtānga Sütra, Trans. by H. Jacobi, (SBE, Vol. XLV).

Tattvārtharājavārttika of Akalanka Bhatta (Kashi, 1915).

Tattvartha-śloka-vārttika of Vidyānandi (NSP. 1918).

Tattvārtha-sūtra of Umāsvāti (Motilai Ladhaji, Poona, 1926).

Tattvārtha-sūtra-bhāṣya with Siddhasenagaṇin's Tīka. Two Vols. (Seth Devacanda Lalbhai Jain Pustakoddhāra Fund Series, Nos. 67 & 76).

Taittirīya Upanişad.

Uttarādhyayana-sūtra, Trans. H. Jacobi. (SBE, Vol. XLV).

Višeṣāvašyaka - bhāṣya, with Šiṣyahitā commentary. (Yaśovijaya Jaina Granthamālā, No. 35).

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